



Rocky Mountain Medical Journal



*Happy
New Year!*



Vol. 47—No. 1
25c Per Copy
\$1.50 Per Year

JUDD ON GASTRIC RESECTION
BUNCH ASKS: IS THE PATIENT ALWAYS RIGHT?
MIDWINTER CLINICS PROGRAM

ad lib.



ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U. S. A.

... in a prescription signifies "freely." This term also has an important bearing on Lilly products, for information concerning their use, though withheld from unprofessional channels, is freely given to physicians. Eli Lilly and Company supports the mutual interests of physician and patient.

For Table of Contents, Turn the First Page

*"Superior hemostatic effect...
upon venous and
capillary
oozing"**

Oxycel®

Oxidized Cellulose

Parke-Davis



*Ault, G. W. & Madigan, E. P.: Am. J. Surg., 77:382, 1949.

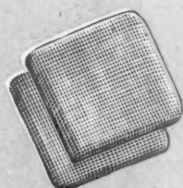
511
2

In 478 cases of anorectal surgery—fissures, hemorrhoids and fistulas—OXYCEL proved an outstandingly effective hemostatic agent. Not a single instance of postoperative hemorrhage occurred and secondary hemorrhage due to removal of gauze or rubber drains was eliminated. Healing progressed satisfactorily and patients experienced a more comfortable postoperative course.

Absorbable and promptly hemostatic, OXYCEL is convenient to use since it is applied directly from the container to bleeding surfaces. To aid the surgeon in stopping bleeding not controllable by clamp or ligature, OXYCEL is available in forms adaptable to many uses.

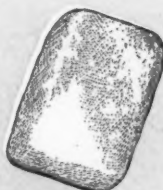
PACKAGE INFORMATION:

OXYCEL is supplied in individual screw-capped bottles.



OXYCEL PADS

(Gauze Type) Sterile
3" x 3" eight-ply pads.



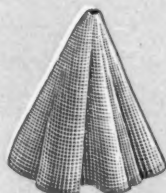
OXYCEL PLEDGETS

(Cotton Type) Sterile
2" x 1" x 1" portions.



OXYCEL STRIPS

(Gauze Type) Sterile
18" x 2" four-ply strips,
pleated in accordion fashion.



OXYCEL FOLEY CONES

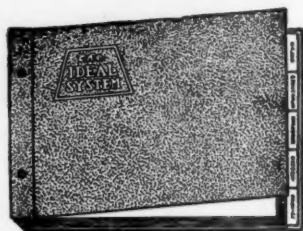
Sterile four-ply gauze-type
discs of 5" or 7" diameter
folded in radially fluted form,
used in prostatectomy.

1949.
PARKE, DAVIS & CO.



L610.51
C71

DOCTORS' PROFESSIONAL & TAX RECORD



Loose-Leaf Book—Actual Size 9 1/2 x 12 1/2 inches

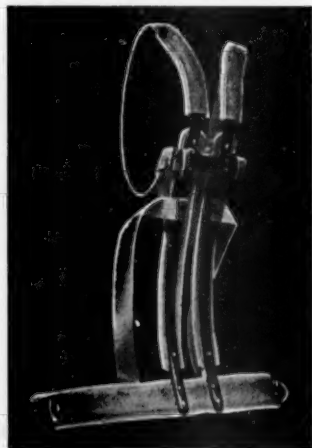
Come in, phone KE. 0241 or mail your order. Use your charge account.

A complete, simplified Bookkeeping System & Tax Record—all in one book, designed expressly for Doctors, Dentists.

Records income, expenses, bad debts, depreciation, contributions, payroll, insurance, inventory, equipment, special, miscellaneous.

Binder, Index & 120 Sheets for 1 Year, \$3.50

Kendrick-Bellamy
KEYSTONE 0241
1641 California St. Denver 2, Colorado



Geo. R. Thornton

Orthopedic Brace and Appliance Co.

1628 Court Place MAin 3026

Write for Measuring Chart

Table of Contents

VOLUME 47

NUMBER 1

JANUARY, 1950

Editorials

Dangerous Perception	17
The Spoils of War.....	17
A Turn to the Right.....	17

♦

Original Articles

Is the Patient Always Right?, C. Pardue Bunch, M.D.	20
Some Clinical Variations of Renal Amyloidosis, Joseph C. Tyor, M.D., and Hallen T. Kuo, M.D.	22
An Easily Constructed, Inexpensive Rubber Walking Heel, Murray E. Gibbens, M.D.	26
Tick Paralysis in Northwestern United States and British Columbia, W. L. Jellison, Ph.D., J. D. Gregson, M.S.	28
The Broadening Scope of Gastric Resection, Edward S. Judd, Jr., M.D.	33
Presidential Address, George E. Baker, M.D.	42

♦

Organization

Colorado	
Program — Fifteenth Annual Midwinter Postgraduate Clinics of the Colorado State Medical Society.....	44
Obituaries	48
Report of Colorado Delegates to the Clinical Session of the A.M.A.....	48
Colorado State Health Department.....	50
New Mexico	
New Mexico Clinical Society.....	52
Obituary	52
Utah	
Obituary	52
Tuberculosis Abstracts	54
Book Corner	54

SALT

without

SODIUM



NEOCURTASAL®

When cardiac failure, hypertension, arteriosclerosis, or pregnancy complications call for a sodium free diet, you can let your patients have

salt without sodium: Neocurtasal, the completely sodium free seasoning agent. Neocurtasal looks and is used like regular table salt.

Constituents: Potassium chloride, ammonium chloride, potassium formate, calcium formate, magnesium citrate and starch. Potassium content 36%; chloride 39.3%; calcium 0.3%; magnesium 0.2%.

Available in convenient 2 oz. shakers and 8 oz. bottles.

NEOCURTASAL,
trademark reg.
U. S. & Canada

NEOCURTASAL,
trademark reg. U. S. & Canada

Winthrop-Stearns INC.
NEW YORK 13, N. Y. WINDSOR, ONT.

ROCKY MOUNTAIN MEDICAL JOURNAL

Title Registered, U.S. Patent Office

Publication Office:

835 Republic Building (1612 Tremont Place), Denver 2, Colorado
Telephone CHerry 5521.

EDITORIAL BOARD

Colorado: Douglas W. Macomber, M.D., Scientific Editor, 1820 Gilpin St., Denver; Lyman W. Mason, M.D., Associate Editor, 1214 Republic Bldg., Denver, (Chairman of Editorial Board).
Montana: Raymond F. Peterson, M.D., Scientific Editor, Butte, Mont.; Herbert T. Caraway, M.D., Associate Editor, Billings, Mont.
New Mexico: Carl H. Gellenthein, M.D., Scientific Editor, Valmora, New Mexico; Harold L. Janu-ary, M.D., Associate Editor, First National Bank Bldg., Albuquerque, New Mexico.
Utah: Richard P. Middleton, M.D., Scientific Editor, Boston Bldg., Salt Lake City; W. H. Tibbals, Associate Editor, 42 South Fifth East St., Salt Lake City.
Wyoming: Earl Whedon, M.D., Scientific Editor, Sheridan; Arthur R. Abbey, Associate Editor, P.O. Box 897, Cheyenne.

Managing Editor: Harvey T. Sethman, 835 Republic Bldg., Denver.

Business Manager: Helen Kearney, 835 Republic Bldg., Denver.

Ownership and Sponsorship: The Rocky Mountain Medical Journal is owned by the Colorado State Medical Society and is published monthly as a non-profit enterprise for the mutual benefit of the organizations which jointly sponsor it. It is published under the direction of the Board of Trustees of the Colorado State Medical Society, assisted by an Editorial Board representing the sponsoring organizations. It is the Official Journal of the Colorado State Medical Society, the Montana State Medical Association, the New Mexico Medical Society, the Utah State Medical Association, the Wyoming State Medical Society, the Rocky Mountain Medical Conference, and the Colorado Hospital Association.

Manuscripts: Scientific Articles, Case Reports, etc., from any state for which this is the Official Journal should be submitted to the Scientific Editor for that state as named in the Editorial Board, above. Other material from any participating state should be submitted to the Associate Editor for that state as named above. Manuscripts from outside the Rocky Mountain area should be sent direct to the Journal office. Manuscripts must be typewritten, double or triple spaced, using only one side of each sheet. It is the policy of this Journal to omit bibliographies.

Advertising: National representatives: The Cooperative Medical Advertising Bureau, 535 North Dearborn Street, Chicago 10, Ill. Local advertising from firms in the Rocky Mountain area should be submitted to the Associate Editor of the appropriate state or to the Journal office. Advertising forms close on the 20th of the month preceding publication; allow ten days additional to insure submitting proofs for approval.

Subscription: \$2.50 per year in advance, postpaid in the United States and its possessions; single copy, 25 cents plus postage. Subscription is included in medical society dues of sponsoring state medical organizations.

Copyright: This Journal is copyright, 1949, by the Colorado State Medical Society. Requests for permission to reproduce anything from the columns of this Journal should be addressed to the Journal office.

Second Class Matter: Entered as second class matter Jan. 22, 1906, at the Postoffice at Denver, Colo., under the Act of Congress of March 3, 1879. Accepted for mailing at special rates of postage provided for in Section 1103, Act of Oct. 3, 1917; authorized July 17, 1918.

The Fairhaven Maternity Hospital

Mrs. H. E. Lowther, Superintendent

Seclusion for the unwed mother.

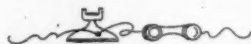
1349 JOSEPHINE

DEXter 1411

Write for descriptive booklet

DENVER

Don't miss important telephone calls



Let us act as your secretary while you are away, day or night; our kindly voice conscientiously tends your telephone business, accurately reports to you when you return.

Telephone ANSWERING Service CALL ALpine 1414



Cambridge Dairy Grade "A" Milk Is Produced and Processed at 690 S. Colo. Blvd.
We do not handle Shipped-in Milk produced Where? How and by Whom? Doctors know the difference
Now Homogenized Vitamin D Milk is available for baby feeding and family use.
We Invite Your Inspection and Appreciate Your Recommendation.



In the City of Bagdad lived Hakeem, the Wise One,
and many people went to him for counsel, which he gave freely to all, asking nothing in return.

There came to him a young man, who had spent much but got little, and said: "Tell
me, Wise One, what shall I do to receive the most for that which I spend?"

Hakeem answered: "A thing that is bought or sold has no value unless it contains that which
cannot be bought or sold. Look for the Priceless Ingredient."

"But what is this Priceless Ingredient?" asked the young man.

Spoke then the Wise One: "My son, the Priceless Ingredient of every product in the market-
place is the Honor and Integrity of him who makes it. Consider his name before you buy."

Copyright, 1922, 1945, E. R. Squibb & Sons

E·R·SQUIBB & SONS

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 185

THE COLORADO STATE MEDICAL SOCIETY

Next Annual Session: Broadmoor Hotel, Colorado Springs, September 20, 21, 22, 23, 1950

OFFICERS

Terms of Officers and Committees expire at the Annual Session in the year indicated. Where no year is indicated, the term is for one year only and expires at the 1950 Annual Session.

President: Fred A. Humphrey, Fort Collins.

President-Elect: Ervin A. Hinds, Denver.

Vice President: A. B. Gjellum, Del Norte.

Constitutional Secretary (three years): George R. Buck, Denver, 1951.

Treasurer (three years): George C. Shivers, Colorado Springs, 1950.

Additional Trustees (three years): Samuel P. Newman, Denver, 1950; Claude D. Bonham, Boulder, 1951; Cyrus W. Anderson, Denver, 1952; E. H. Munro, Grand Junction, 1952.

(The above nine officers compose the Board of Trustees of which Dr. Samuel P. Newman is the 1949-1950 Chairman.)

Board of Counsellors (three years): District No. 1: Clemens F. Eakins, Brush, 1951; No. 2: Ella A. Mead, Greeley, 1951; No. 3: L. G. Crosby, Denver, 1951 (Chairman of Board for 1949-50); No. 4: Lanning E. Likes, Lamar, 1950; No. 5: Guy H. Hopkins, Pueblo, 1950; No. 6: C. Rex Fuller, Salida, 1950; No. 7: Leo W. Lloyd, Durango, 1952; No. 8: Arch H. Gould, Grand Junction, 1952; No. 9: Marvel L. Crawford, Steamboat Springs, 1952.

Board of Supervisors (two years): L. D. Buchanan, Wray, 1950; W. F. Deal, Craig, 1950; G. C. Cary, Grand Junction, 1950, Chairman; W. A. Campbell, Colorado Springs, 1950; Ralph S. Johnston, Sr., La Junta, 1950; William A. Liggett, Denver, 1950, Secretary; Edgar A. Kliff, Sterling, 1951; Keith F. Krausnick, Lamar, 1951; Charles L. Mason, Durango, 1951; Ira L. Howell, Alamosa, 1951; Howard H. Houston, Boulder, 1951; George M. Myers, Pueblo, 1951.

Delegates to American Medical Association (two years): William H. Halley, Denver, 1950; (Alternate: Kenneth C. Sawyer, Denver, 1950); George A. Unfug, Pueblo, 1951; (Alternate: Herman C. Graves, Grand Junction, 1951).

Foundation Advocate: Walter W. King, Denver.

Executive Office Staff: Mr. Harvey T. Sethman, Executive Secretary; Miss Helen Kearney, Assistant Executive Secretary; Mr. Evan A. Edwards, Public Relations Director and Field Secretary, 835 Republic Building, Denver 2, Colorado, Telephone CHerry 5521.

General Counsel: Mr. J. Peter Nordlund, Attorney-at-Law, Denver.

STANDING COMMITTEES

Credentials: George R. Buck, Denver, Chairman; others to be appointed.

Public Policy: M. L. Phelps, Denver, Chairman; C. F. Hegner, Denver; I. E. Hendryson, Denver, Vice Chairman; F. B. McGlone, Denver; W. R. Lipscomb, Denver; T. M. Rogers, Sterling; Sidney Anderson, Alamosa; Harvey M. Tupper, Grand Junction; C. S. Gylesen, Colorado Springs; H. L. Davis, La Junta; R. T. Porter, Greeley; G. C. Milligan, Englewood; Francis S. Adams, Pueblo; Ex-Officio Members: F. A. Humphrey, Fort Collins, President; Ervin A. Hinds, Denver, President-Elect; George R. Buck, Denver, Constitutional Secretary.

Sub-Committee on Legislation: John B. Farley, Pueblo, Chairman.

Subcommittee on Nurses' Education: L. R. Safarik, Denver, Chairman; John R. Evans, Co-chairman; Frank E. McGlone, Denver; Harry C. Bryan, Colorado Springs; Robert T. Porter, Greeley.

Health Education (two years): E. H. Munro, Grand Junction, 1950; F. O. Robertson, Denver, 1950; R. B. Bradshaw, Alamosa, 1950; James A. Mason, Denver, 1950; Miss Norma Johannis, Denver, 1950; H. T. Low, Pueblo, 1950; J. D. Bartholomev, Boulder, Chairman, 1951; A. C. Sudan, Denver, 1951; R. J. Savage, Denver, 1951.

Sub-Committee on Weekly Health Column: J. L. Campbell, Denver, Chairman; F. C. Campbell, Denver; E. L. Binkley, Denver; H. F. Bramley, Denver.

Scientific Work: Terry J. Gromer, Denver, Chairman; William B. Condon, Denver; Robert S. Liggett, Denver; E. L. Binkley, Jr., Denver; T. E. Best, Denver; James M. Perkins, Denver; Samuel E. Childs, Jr., Denver; Joseph H. Patterson, Denver.

Arrangements: To be appointed.

Medicolegal (two years): R. W. Arndt, Denver, 1950; George B. Packard, Denver, 1950; K. D. A. Allen, Denver, 1950; C. E. Blumel, Denver, Chairman, 1951; Lyman W. Mason, Denver, 1951; Altha Thomas, Denver, 1951.

Medical Education and Hospitals: Fred H. Hartshorn, Denver, Chairman; George F. Wollgast, Denver; Kenneth C. Sawyer, Denver; James E. Hutchison, Denver; Robert S. Liggett, Denver; Henry Swan, Denver; J. B. McNaught, Denver. Ex-Officio Members: F. A. Humphrey, Fort Collins, President, C.S.M.S.; Ervin A. Hinds, President-Elect, C.S.M.S.; Mr. Hubert W. Hughes, Denver, President, Colo. Hosp. Assoc.; Ward Darley, Dir. of the Univ. of Colo. Medical Center.

Library and Medical Literature: W. W. King, Denver, Chairman; A. J. Markley, Denver; T. E. Beyer, Denver.

Medical Service Plans: James R. Blair, Denver, Chairman; F. H. Good, Denver; Henry A. Buchtel, Denver; T. K. Mahan, Grand Junction; V. L. Bolton, Colorado Springs; Scott A. Gale, Pueblo; L. W. Holden, Boulder; J. A. Weaver, Jr., Greeley.

Neurology: R. C. Chatfield, Denver, Chairman.

PUBLIC HEALTH COMMITTEES

General Committee on Public Health: Consists of the chairmen of the following eight public health sub-committees, presided over by James S. Cullyford, Denver, as General Chairman.

Cancer Control: Stanley K. Kurland, Denver, Chairman; J. C. Mendenhall, Denver; L. E. Likes, Lamar; Robert K. Brown, Denver; James B. McNaught, Denver.

Tuberculosis Control: John I. Zarit, Denver, Chairman; W. J. Hinzelman, Greeley; J. P. McGraw, Pueblo.

Sanitation: H. D. Palmer, Denver, Chairman; G. W. Stiles, Denver; S. W. Downing, Denver.

Rural Health and Health Units: Robert M. Lee, Fort Collins, Chairman; L. N. Myers, Cheyenne Wells; M. R. Tyler, Denver.

Industrial Health: R. F. Bell, Louviers, Chairman; David W. Boyer, Pueblo; Nicholas S. Saliba, Walsenburg; Frank Prinel, Denver.

Maternal and Child Health: J. L. Sadler, Fort Collins, Chairman; J. H. Amesse, Denver; J. D. Whitmore, Denver.

Rehabilitation and Crippled Children: H. C. Hughes, Denver, Chairman; Lewis Barbato, Denver; M. G. Nims, Denver; W. W. Haggart, Denver; R. H. Mellen, Colorado Springs; John Nelson, Denver.

Mental Hygiene: F. H. Zimmerman, Pueblo, Chairman; Bradford Murphy, Denver; J. M. Lyon, Denver.

SPECIAL COMMITTEES

Rocky Mountain Medical Conference (five years): D. W. Macomber, Denver, 1954; L. Clark Hepp, Denver, 1953; G. P. Lingenfeller, Denver, Chairman, 1952; Ward Darley, Denver, 1951; L. W. Bortree, Colorado Springs, 1950.

Advisory to Auxiliary: Ervin A. Hinds, Denver, Chairman; Samuel P. Newman, Denver; M. L. Phelps, Denver.

Medical Disaster Commission: Foster Matchett, Denver, Chairman; O. S. Philpott, Denver, Vice Chairman; Karl F. Arndt, Denver, Secretary; Harry C. Hughes, Denver; R. J. McDonald, Denver; Karl F. Sunderland, Denver; Henry Swan, Denver; Rudolph E. Giehm, Denver; William S. Curtis, Denver; M. S. Donovan, Denver; T. P. Sears, Fort Logan. Others to be appointed.

Advisory to U.M.W. Welfare Fund (Executive Committee, three-year terms; others, one year): Executive: Ligon Price, Hayden, 1952; J. H. Lumme, Walsenburg, 1952; W. W. Haggart, Chairman, 1951; F. H. Good, 1951; J. S. Bouslog, 1951, all of Denver; W. H. Halley, 1950; C. F. Hegner, 1950, both of Denver; R. F. Bell, 1950, Louviers. Other members: D. W. McCarty, Longmont, 1950; J. W. Craighead, Pueblo, 1950; F. A. Humphrey, Fort Collins, 1950; Millard F. Smith, Trinidad, 1950.

A.W.A. Educational Campaign: John S. Bouslog, Chairman; A. E. Lubchenko, Vice Chairman; Ervin A. Hinds, George R. Buck, McKinnie L. Phelps, William H. Halley, all of Denver, plus one member from each component society appointed by that society (names to be added here next month).

Delegate to Colorado Interprofessional Council (five years): L. R. Safarik, Denver, 1954; (Alternate, J. R. Evans, Denver, 1954).

Representative to Rocky Mountain Radio Council: I. E. Hendryson, Denver.

Representatives to Adult Education Council: Cyrus W. Anderson and William E. Hay, both of Denver.

Physicians'
choice

*in a wide variety
of allergic disorders*

TRIMETON
Schering



TRIMETON



MONTANA STATE MEDICAL ASSOCIATION

NEXT ANNUAL SESSION: BOZEMAN, MONTANA, SUMMER, 1950

OFFICERS, 1949-1950

Terms of Officers and Committees expire at the Annual Session in the year indicated. Where no year is indicated, the term is for one year only and expires at 1950 Annual Session.

President: Thomas F. Walker, Great Falls.
President-Elect: C. H. Fredrickson, Missoula.
Vice President: F. L. McPhail, Great Falls.
Secretary-Treasurer: Herbert T. Caraway, Billings.
Delegate to American Medical Association: Raymond F. Peterson, Butte, 1950; Alternate, Thomas B. Moore, Kalispell, 1950.

STANDING COMMITTEES

Executive Committee: Thos. F. Walker, Great Falls, Chairman; L. W. Allard, Billings; H. T. Caraway, Billings; C. H. Fredrickson, Missoula; Thos. L. Hawkins, Helena.

Economic Committee: M. A. Shillington, Glendive, Chairman; W. E. Harris, Livingston; W. E. Long, Anaconda; D. S. MacKenzie, Jr., Havre; J. C. Shultz, Butte; E. A. Welden, Lewistown.

Legislative Committee: I. J. Bridenstine, Missoula, Chairman; J. M. Flinn, Helena; T. L. Hawkins, Helena; R. C. Monahan, Butte; T. B. Moore, Kalispell; S. D. Whetstone, Cut Bank.

Neurology and History of Medicine Committee: L. W. Brewer, Missoula, Chairman; A. A. Dodge, Kalispell; J. H. Garberson, Miles City; E. M. Gans, Harlowton; J. P. Ritchey, Missoula; J. I. Wernham, Billings.

Public Relations Committee: H. T. Caraway, Billings, Chairman; A. W. Axley, Havre; R. F. Peterson, Butte; L. G. Russell, Billings; R. L. Towne, Kalispell.

Legal Affairs and Malpractice Committee: A. L. Gleason, Great Falls, Chairman; J. H. Bridenbaugh, Billings; M. O. Burns, Kalispell; P. E. Kane, Butte; R. D. Knapp, Wolf Point; A. M. Luck, Livingston; J. C. MacGregor, Great Falls; W. P. Morrison, Missoula; B. R. Tarbox, Forsyth.

Program Committee: H. W. Gregg, Butte, Chairman; R. L. Casebeer, Butte; C. H. Fredrickson, Missoula; J. A. Layne, Great Falls; J. J. Malec, Anaconda.

Interprofessional Relationship Committee: L. W. Allard, Billings, Chairman; C. R. Cany, Butte; R. A. Benke, Kalispell; B. J. Heetderks, Bozeman; E. S. Murphy, Missoula.

Nominating Committee: J. H. Garberson, Miles City, Chairman; R. G. Johnson, Harlowton; J. P. Ritchey, Missoula; F. I. Sabo, Bozeman; S. V. Wilking, Butte.

Auditing Committee: G. W. Setzer, Malta, Chairman; C. P. Brooke, St. Ignace; Robt. Leeds, Chinook; P. E. Logan, Great Falls; R. G. Scherer, Bozeman.

Cancer Committee: Mary Martin, Billings, Chairman; R. E. Benson, Billings; W. F. Cashmore, Helena; Walter E. Cox, Missoula; D. C. Epler, Bozeman; Philip Pallister, Boulder; W. C. Robinson, Shelby.

Maternal and Child Welfare Committee: F. L. McPhail, Great Falls, Chairman.

Subcommittee on Obstetrics: E. L. Hall, Great Falls, Chairman; L. A. Barrow, Billings; L. W. Brewer, Missoula; H. B. Campbell, Missoula; G. A. Carmichael, Missoula; Maude Gerdes, Billings; J. B. Hynes, Billings; R. E. Mattison, Billings; C. W. Pemberton, Butte; S. N. Preston, Missoula; A. E. Ritt, Great Falls.

Subcommittee on Pediatrics: G. H. Barmeyer, Missoula; E. C. Farrand, Jordan; P. J. Friden, Great Falls; D. L. Gillespie, Butte; E. A. Hagmann, Billings; O. M. Moore, Helena.

Tuberculosis Committee: F. L. Ensbree, Bozeman, Chairman; G. A. Anderson, Deer Lodge; H. V. Gibson, Great Falls; A. R. Klintner, Missoula; P. A. Smith, Glasgow; F. I. Terrill, Galen.

Fracture and Orthopedic Committee: W. H. Hagen, Billings, Chairman; L. W. Allard, Billings; J. K. Colman, Butte; S. L. Odgers, Butte; Geo. A. Sexton, Great Falls; J. C. Wolgamot, Great Falls.

Rural Health Committee: B. C. Farrand, Jordan, Chairman; F. S. Cannon, Conrad; L. S. Crary, Fairfield; David Gregory, Glasgow; W. G. Tanglin, Polson.

Industrial Welfare Committee: J. M. Hicks, Great Falls, Chairman; R. E. Brogan, Billings; A. B. Little, Helena; Geo. G. Sale, Missoula; R. E. Walker, Livingston; F. L. Unmack, Deer Lodge.

Rheumatic Fever and Heart Committee: F. R. Schemm, Great Falls, Chairman; R. L. Eck, Lewistown; F. J. Friden, Great Falls; D. L. Gillespie, Butte; J. S. Gilson, Great Falls; H. W. Gregg, Butte; Elizabeth Grimm, Billings; T. F. Walker, Jr., Great Falls; O. M. Moore, Helena.

Rocky Mountain Medical Conference Committee: Thos. F. Walker, Great Falls, 1950; John E. Hynes, Billings, 1951; P. K. Wanlata, Great Falls, 1952; H. W. Gregg, Butte, 1953; H. T. Caraway, Billings, 1954.

SPECIAL COMMITTEES

Emergency Medical Service Committee: D. J. MacDonald, Billings, Chairman; Paul J. Gans, Lewistown; L. G. Griffith, Kalispell; T. M. Keenan, Great Falls; S. A. Olson, Glendive; W. P. Smith, Columbia.

Industrial Accident Board Committee: Thos. L. Hawkins, Helena, Chairman; D. J. Almas, Havre; H. H. James, Butte; E. R. Grigg, Bozeman; E. L. Gallivan, Helena.

Hospital Relations Committee: E. Hildebrand, Great Falls, Chairman; R. B. Beans, Great Falls; J. H. Bridenbaugh, Billings; Walter B. Cox, Missoula; R. S. Leighton, Great Falls; W. W. McLaughlin, Great Falls; Mary Martin, Billings; B. F. Peterson, Butte; G. P. Riatt, Billings; P. T. Spurck, Butte.

Mental Hygiene Committee: W. S. Wilder, Warm Springs, Chairman; J. J. Bulger, Great Falls; R. W. Clapp, Butte; M. A. Ruona, Billings; M. A. Shillington, Glendive.

Collection

of your

Accounts

All reports show a trend toward slower and harder collections in the months ahead.

At the first sign of neglect you will save money if they are turned over to us for collection.

Comparison of collection results, backed by 35 years of experience, proves you obtain greater results at less cost, when you list your accounts

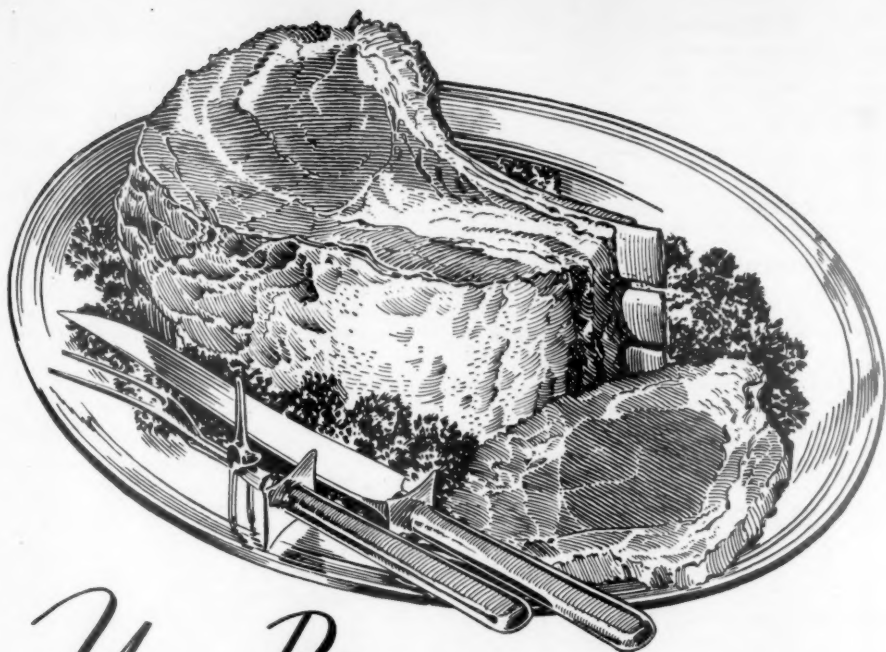
with

The American Medical and Dental Association

Suite 524, 810 14th St.

Tabor 2331

Denver, Colorado



Your Patients...

And the Meat They Eat

The established relationship between sound dietary planning and a state of maintained good health emphasizes the nutritional importance of meat, man's favorite protein food.

Not only does meat taste good, but of greater significance, it provides a host of nutritional benefits. Developments in the field of nutrition* have proved that complete protein—the kind that meat supplies in abundance—aids in building and maintaining immunity, hastens recovery after acute infectious diseases and following injury and burns, promotes health during pregnancy, aids in the growth and development of husky children, and is needed to maintain everyone in top physical condition.

No matter from what walk of life your patients come, and whether their pocketbooks demand economy or permit satisfaction of that urge for the fanciest cuts, meat gives them full value for their money.

*McLester, J. S.: Protein Comes Into Its Own, J.A.M.A. 139:897 (April 2) 1949.



The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

American Meat Institute
Main Office, Chicago...Members Throughout the United States

NEW MEXICO MEDICAL SOCIETY

OFFICERS—1949-1950

President: J. W. Hannett, Albuquerque.
President-Elect: L. J. Marshall, Roswell.
Vice President: Leland S. Evans, Las Cruces.
Secretary-Treasurer: H. L. January, Albuquerque.
Executive Secretary: Mr. Ralph R. Marshall, Albuquerque.
Councillors (3 years): Carl Mulky, Albuquerque; J. C. Sedgwick, Las Cruces. (2 years): W. D. Dabbs, Clovis; A. C. Shuler, Carlsbad. (1 year): A. S. Lathrop, Santa Fe; C. H. Gellenthien, Valmora.
Delegate to A.M.A.: John F. Conway, Clovis, 1950.
Alternate Delegate to A.M.A.: C. H. Gellenthien, Valmora, 1950.

COMMITTEES—1949-1950

Basic Sciences: Raymond L. Young, Santa Fe, Chairman; W. E. Nissen, Albuquerque; Walter A. Stark, Las Vegas.
Rural Medical Service: Stuart Adler, Albuquerque, Chairman; Samuel R. Zeigler, Espanola; A. T. Gordon, Tucumcari; L. G. Foster, Reserve; J. P. Turner, Carrizozo.
Cancer: Murray Friedman, Santa Fe, Chairman; Van A. Odle, Roswell; J. R. Van Atta, Albuquerque; J. W. Grossman, Albuquerque; R. C. Derbyshire, Artesia.

Veneral Disease Control: Sam Jelso, Albuquerque, Chairman; V. E. Berchtold, Santa Fe; L. M. Miles, Albuquerque; Vincent Accardi, Gallup; F. C. Bohannon, Carlsbad.

Legislative and Public Policy: A. S. Lathrop, Santa Fe, Chairman; H. T. Watson, Gallup; C. E. Elliott, Raton; John F. Conway, Clovis; H. M. Mortimer, Las Vegas; G. S. Morrison, Roswell; R. A. Watts, Silver City; Ashley Pond, Taos; W. L. Minear, Hot Springs; L. S. Evans, Las Cruces; W. M. Thaxton, Tucumcari; William C. White, Los Alamos; W. O. Connor, Albuquerque; C. S. Stone, Hobbs; A. C. Shuler, Carlsbad; L. J. Whitaker, Deming.

Public Relations: C. F. Bunch, Artesia, Chairman; Earl L. Malone, Roswell; O. S. Cramer, Albuquerque; Eric P. Hausner, Santa Fe; E. A. Heffner, Hobbs.

Tuberculosis: C. H. Gellenthien, Valmora, Chairman; William H. Thearle, Albuquerque; D. O. Shields, Albuquerque; Carl Mulky, Albuquerque; H. S. A. Alexander, Santa Fe.

Advisory Committee on Insurance Compensation: L. M. Overton, Albuquerque, Chairman; R. E. Forbis, Albuquerque; Edward Farnall, Albuquerque; H. D. Corbuser, Santa Fe.

National Emergency Medical Service: A. E. Reymont, Santa Fe, Chairman; L. G. Rice, Albuquerque; C. M. Thompson, Albuquerque.

Board of Supervisors: L. G. Rice, Bernalillo County; Van A. Odle, Chaves County; Milton Floersheim, Colfax County; John F. Conway, Curry County; C. P. Bunch, Eddy County; Frank W. Parker, Jr., McKinley County; LeGrand Ward, Santa Fe County; W. A. Stark, San Miguel County.

Oculist Prescription Service Exclusively
SHADFORD-FLETCHER OPTICAL CO.
Dispensing Opticians
 228 16th Street, Denver, Colo. AComa 2611
 3705 East Colfax (Medical Center Building). Florida 0202



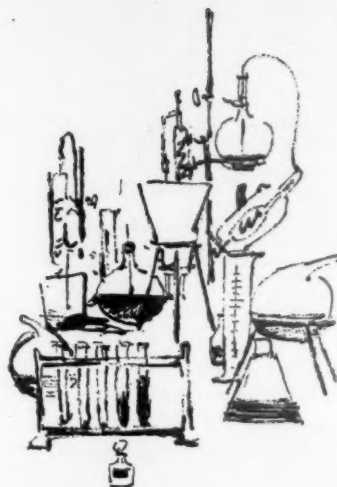
These fine Dairy Cattle, a portion of City Park's large herd of Guernsey and Holstein cows, are scientifically fed and cared for, continuously tested by competent veterinarians. Only through such precise watchfulness does City Park Milk receive Grade "A" designation which it enjoys. Choose City Park's regular Grade "A" Pasteurized or Homogenized milk today — notice the particularly clean, fresh flavor.

'Phone
EAsT 7707

City Park Dairy

Cherry Creek
Drive—Denver

AUREOMYCIN



AUREOMYCIN

HYDROCHLORIDE LEDERLE

in the Pneumonias

Aureomycin possesses a broad spectrum of effectiveness that indicates its use in pneumococcal, streptococcal, staphylococcal and so-called "virus" pneumonias. It has also been shown to be highly effective against *Hemophilus influenzae* and is indicated in infections caused by that organism.

Aureomycin is useful for the control of bacteroides septicemia, brucellosis, Gram-negative infections—including those caused by the coli-aerogenes group, Gram-positive infections—including those caused by streptococci, staphylococci and pneumococci, granuloma inguinale, lymphogranuloma venereum, psittacosis, Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, tularemia, typhus, viral-like and bacterial infections of the eye.

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule. **Ophthalmic:** Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

LEDERLE LABORATORIES DIVISION

AMERICAN Cyanamid COMPANY

30 Rockefeller Plaza, New York 20, N. Y.

THE UTAH STATE MEDICAL ASSOCIATION

OFFICERS, 1949-1950

President: Conrad H. Jensen, Ogden.
President-Elect: V. P. White, Salt Lake City.
Past President: O. A. Ogilvie, Salt Lake City.
Honorary President: D. G. Edmunds, Salt Lake City.
First Vice President: Sims E. Duggins, Panguitch.
Second Vice President: Jules E. Trowbridge, Bountiful.
Third Vice President: Seth E. Smoot, Provo.
Secretary: T. C. Weggeland, Salt Lake City.
Executive Secretary: Mr. W. H. Tibbals, Salt Lake City.
Treasurer: L. J. Paul, Salt Lake City.
Councillor First District: J. G. Olson, Ogden.
Councillor Second District: Vincent L. Rees, Salt Lake City.
Councillor Third District: L. W. Oaks, Provo.
Delegate to A.M.A., 1950 and 1951: George Fister, Ogden.
Alternate Delegate to A.M.A., 1950 and 1951: J. J. Weight, Provo.
Editor of the Utah Section of the Rocky Mountain Medical Journal: R. F. Middleton, Salt Lake City.
Board of Supervisors: 1951, Clark Rich, Ogden; 1952, Ezra Cragun, Logan; 1953, Paul K. Edmunds, Cedar City; 1954, J. G. McQuarrie, Richfield; 1955, J. C. Hubbard, Price.

STANDING COMMITTEES

Rocky Mountain Medical Conference Continuing Committee: 1950, K. B. Castleton, Chairman, Salt Lake City; 1951, Clark Rich, Ogden; 1952, Noall Z. Tannek, Layton; 1953, T. R. Seager, Vernal; 1954, R. F. Middleton, Salt Lake City.
Scientific Program Committee: T. C. Weggeland, Chairman, Salt Lake City; Vincent L. Rees, Salt Lake City.
Public Policy and Legislation Committee: 1950, N. F. Hicken, Chairman, Salt Lake City; 1950, Omar Budge, Logan; 1950, George A. Allen, Salt Lake City; 1951, F. R. King, Price; 1951, R. V. Larson, Roosevelt; 1951, W. B. West, Ogden; 1952, Chas. Ruggeri, Salt Lake City; 1952, J. C. Hubbard, Price; 1952, Wilford G. Biesinger, Springville.
Medical Defense Committee: 1950, Homer Smith, Salt Lake City; 1950, L. N. Osman, Chairman, Salt Lake City; 1950, Edwin D. Zeman, Ogden; 1951, Charles W. Woodruff, Salt Lake City; 1951, James Westwood, Provo; 1951, L. H. Merrill, Hiawatha; 1952, E. L. Hanson, Logan; 1952, Reed Farnsworth, Cedar City; 1952, H. A. Derry, Richfield.
Medical Education and Hospitals Committee: 1950, G. G. Richards, Chairman, Salt Lake City; 1950, Ray T. Woolsey, Salt Lake City; 1950, T. E. Robinson, Salt Lake City; 1951, John Bowen, Provo; 1951, George

H. Curtis, Salt Lake City; 1951, R. O. Porter, Logan; 1952, Ralph Ellis, Ogden; 1952, Philip Price, Salt Lake City; 1952, W. H. Anderson, Ogden.

Medical Economics Committee: 1950, W. T. Ward, Salt Lake City; 1951, W. R. Merrill, Brigham City; 1951, Ralph Pendleton, Chairman, Salt Lake City; 1952, Grant F. Kearns, Ogden; 1952, Preston Hughes, Spanish Fork.

Public Health Committee: 1950, F. D. Spencer, Salt Lake City; 1951, R. N. Hirst, Ogden; 1952, Seth E. Smoot, Provo; 1952, James E. Davis, Chairman, Salt Lake City.

Military Affairs and National Emergency Committee: Charles Woodruff, Chairman, Salt Lake City; L. J. Paul, Salt Lake City; Maxel Skolfield, Salt Lake City; W. M. Gorishek, Standardville; L. K. Cullimore, Orem; Ray H. Barton, Magna; D. T. Madsen, Price; Riley G. Clark, Provo; Willis Hayward, Logan; Leo Benson, Ogden.

Tuberculosis and Cardiovascular Diseases Committee: Elmer M. Kirkpatrick, Chairman, Salt Lake City; Ray Ruml, Salt Lake City; W. C. Walker, Salt Lake City; Donald M. Moore, Ogden; Don C. Merrill, Provo; D. O. N. Lindberg (Associate Member), Ogden.

Cancer Committee: James P. Kerby, Salt Lake City; E. A. Lawrence, Salt Lake City; Elmer Nielson, Chairman, Salt Lake City; E. D. Zeman, Ogden; James Westwood, Provo; W. J. Reichman, St. George; J. Clare Hayward, Logan; R. V. Larsen, Roosevelt; T. R. Gledhill, Richfield; Quinn A. Whiting, Price.

Fracture Committee: A. M. Okeberry, Chairman, Salt Lake City; Boyd G. Holbrook, Salt Lake City; Louis Peery, Ogden; Paul A. Pemberton, Salt Lake City.

Neurology Committee: E. B. Muir, Chairman, Salt Lake City; A. S. Crandall, Salt Lake City.

Industrial Health Committee: Frank J. Winget, Chairman, Salt Lake City; Byron W. Daynes, Salt Lake City; Wayne Alred, Orem; W. F. Loomis, Ogden; Sherman Brinton, Salt Lake City.

Advisory Committee to the Woman's Auxiliary: Silas S. Smith, Chairman, Salt Lake City; A. A. Innes, Ogden; J. R. Smith, Provo.

Public Relations Committee: Ray T. Woolsey, Chairman, Salt Lake City; L. V. Broadbent, Cedar City; Geo. H. Love, Jr., Ogden; O. P. Heninger, Provo; R. N. Malouf, Richfield; Ray E. Spendlove, Vernal; Paul Burgess, Hyrum; J. Leroy Kimball, Salt Lake City.

Mental Health Committee: E. L. Weimers, Provo; Wm. D. O'Gorman, Ogden; L. G. Moersch, Salt Lake City; Roy A. Danks, Chairman, Salt Lake City.

Rural Health Committee: J. J. Weight, Chairman, Provo; Joseph Tanner, Layton; T. R. Aldous, Tooele; Harold E. Young, Midvale; J. H. Rasmussen, Brigham City.

Professional and Hospital Relationships Committee: James P. Kerby, Chairman, Salt Lake City; V. P. White, Salt Lake City; R. P. Middleton, Salt Lake City; Leland R. Cowan, Salt Lake City; V. L. Ward, Ogden; J. Russell Smith, Provo; Hugh O. Brown, Salt Lake City.

Better Flowers at Reasonable Prices

*"Orders Delivered to Any City by
Guaranteed Service"*

Special attention given to floral tributes
Also Hospital Flowers

Call KEystone 5106

Park Floral Co. Store

1643 Broadway

Denver, Colo.

Denver Oxygen Co., Inc.

Corner 10th and Lawrence Sts.

TABor 5138

Medical Gas Division

MEDICAL OXYGEN

CARBON DIOXIDE-OXYGEN MIXTURES

AVIATORS' BREATHING OXYGEN

WATER COMPRESSED NITROGEN

WATER COMPRESSED AIR

NITROUS OXIDE ETHYLENE CYCLOPROPANE

HELIUM OXYGEN MIXTURE PURE HELIUM 100%

Twenty-Four Hour Service

Elmer Engraving Co.

2131 CURTIS ST. DENVER, 2, COLORADO 7a2701

COLOR PROCESS
LINE & HALFTONE
BEN DAY
ILLUSTRATORS·DESIGNERS

**PHOTO
ENGRAVERS**



30 day wonder

The new-born infant is truly a "30-day wonder" taking in his stride the sudden changes birth imposes and adjusting accordingly. The rapid increase in weight is, alone, a feat no adult could duplicate. The right start on the right feeding is of vital importance—particularly during the first 30 days when infant mortality is at its highest and when he not only must regain his birthweight *but keep on gaining* if he is to survive.

'Dexin' has proved an excellent "first carbohydrate" because of its high dextrin content. It (1) resists fermentation by the usual intestinal organisms, (2) tends to hold gas formation, distention and diarrhea to a minimum, and (3) promotes the formation of soft, flocculent, easily digested curds.

Simply prepared in hot or cold milk, 'Dexin' brand High Dextrin Carbohydrate provides well-taken and well-retained nourishment. 'Dexin' *does* make a difference.

Literature on request

HIGH DEXTRIN CARBOHYDRATE

'Dexin'

BRAND

Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available carbohydrate 99% • 115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods and Nutrition, American Medical Association. 'Dexin' Reg. Trademark



BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 East 41st St., New York 17, N. Y.

THE WYOMING STATE MEDICAL SOCIETY

OFFICERS

President: DeWitt Dominick, Cody.
President-Elect: Karl Krueger, Rock Springs.
Vice President: Paul Holts, Lander.
Treasurer: P. M. Schunk, Sheridan.
Secretary: G. H. Phelps, Cheyenne.
Delegate A.M.A.: Roscoe Reece, Casper.
Alternate Delegate A.M.A.: W. A. Buntin, Cheyenne.
Executive Secretary: Mr. Arthur R. Abbey, Cheyenne.

COMMITTEES

Rocky Mountain Medical Conference: Earl Whedon, Chairman, Sheridan; George H. Phelps, Cheyenne; H. L. Harvey, Casper; C. W. Jeffrey, Rawlins; L. W. Storey, Laramie.

Syphilis Committee: L. H. Wilmoth, Chairman, Lander; F. H. Haigler, Casper; N. E. Morad, Casper; C. L. Rogers, Sheridan; B. Gillits, Thermopolis.

Cancer Committee: John Gramlich, Chairman, Cheyenne; M. C. Henrich, Casper; Thomas B. Croft, Lovell; J. R. Newnam, Cheyenne; Franklin Yoder, Cheyenne.

Medical Economics Committee: C. L. Rogers, Chairman, Sheridan; Neil A. Vicklund, Thermopolis; H. L. Harvey, Casper; J. S. Hellewell, Evanston; H. E. Stuckenhoff, Casper.

Fracture Committee and Industrial Health: W. K. Mylar, Chairman, Cheyenne; Gordon Whistad, Casper; K. E. Krueger, Rock Springs; Eugene Pelton, Laramie; Lowell D. Kattenhorn, Powell; J. E. Hoadley, Gillette; Philip Teal, Cheyenne.

Medical Defense Committee: George E. Baker, Chairman, Casper; W. A. Buntin, Cheyenne; E. W. DeKay, Laramie.

Councillors: Earl Whedon, Chairman, Sheridan; George E. Baker, Casper; E. W. DeKay, Laramie; DeWitt Dominick, President, Cody; George H. Phelps, Secretary, Cheyenne.

Advisory to Women's Auxiliary: Thomas B. Croft, Chairman, Lovell; John R. Bunch, Laramie; W. A. Buntin, Cheyenne; J. C. Jones, Cody.

Veterans Affairs and Military Service Committee: G. W. Koford, Chairman, Cheyenne; Jack Rowlett, Laramie; L. B. Morgan, Torrington; R. C. Stratton, Green River; Bernard Sullivan, Laramie; G. W. Henderson,

Casper; G. M. Knapp, Casper; A. J. Allegretti, Cheyenne; E. J. Gullfoyle, Newcastle; DeWitt Dominick, President, Cody; George H. Phelps, Secretary, Cheyenne.

Blue Cross Hospital Committee: R. I. Williams, Chairman, Cheyenne, 1950; E. W. DeKay, Laramie, 1951; J. Cedric Jones, Cody, 1952; J. W. Sampson, Sheridan, 1953.

Public Policy and Legislation: George H. Phelps, Chairman, Cheyenne; George E. Baker, Casper; W. A. Buntin, Cheyenne; E. W. DeKay, Laramie; C. W. Jeffrey, Rawlins; G. W. Koford, Cheyenne; K. E. Krueger, Rock Springs; R. H. Reece, Casper.

Palliative Committee: E. W. Gardner, Chairman, Douglas; E. C. Ridgway, Cody; Franklin Yoder, Cheyenne; Bernard Stack, Thermopolis; Philip Teal, Cheyenne; G. O. Beach, Casper; E. J. Sullivan, Laramie.

State Institutions Advisory Committee: R. H. Kanable, Chairman, Basin; George H. Phelps, Cheyenne; Franklin Yoder, Cheyenne; George R. James, Casper; C. D. Anton, Sheridan; J. S. Hellewell, Evanston.

Neurology Committee: Earl Whedon, Chairman, Sheridan; C. H. Flatz, Casper; Franklin Yoder, Cheyenne.

Public Health Department Liaison Committee: E. C. Ridgway, Chairman, Cody; R. P. Fitzgerald, Casper; J. W. Sampson, Sheridan; E. C. Stratton, Green River; O. K. Scott, Casper; E. G. Johnson, Douglas.

Rural Health Committee: Paul Holts, Chairman, Lander; William K. Roene, Wheatland; Andrew Buntin, Cheyenne; G. M. Knapp, Casper; R. N. Bridenbaugh, Powell.

Child Health Committee: O. K. Scott, Chairman, Casper; Paul Emerson, Cheyenne; John Gramlich, Cheyenne; J. T. Murphy, Casper; E. C. Ridgway, Cody; David M. Flett, Cheyenne; A. R. Abbey, Cheyenne.

Council on National Emergency Service: George H. Phelps, Chairman, Cheyenne; R. H. Reece, Casper; E. W. DeKay, Laramie; P. M. Schunk, Sheridan; K. S. Krueger, Rock Springs; Albert T. Sodman, Green River.

Judicial and Advisory Committee: District 7, George E. Baker, Chairman, Casper; District 1, George H. Phelps, Cheyenne; District 1, R. I. Williams, Cheyenne; District 1, J. D. Shingle, Cheyenne; District 2, C. W. Jeffrey, Rawlins; District 3, J. S. Hellewell, Evanston; District 4, P. M. Schunk, Sheridan; District 5, J. Cedric Jones, Cody; District 6, E. J. Gullfoyle, Newcastle.

COLORADO HOSPITAL ASSOCIATION

OFFICERS

President: James P. Dixon, Denver General Hospital, Denver.
President-Elect: Helen Pixley, Park View Episcopal Hospital, Pueblo.
Vice President: Sr. M. Johanna, Sacred Heart Hospital, Lamar.
Treasurer: M. A. Moritz, Denver General Hospital, Denver.
Executive Secretary: R. A. Pontow, Colorado General Hospital, Denver.
Trustees: Louis Liswood, National Jewish Hospital, Denver (1950); DeMoss Taliaferro, Children's Hospital, Denver (1950); Roy R. Anderson, Presbyterian Hospital, Denver (1950); Rev. Allen H. Erb, Mennonite Hospital and Sanitarium, La Junta (1951); Roy R. Prangley, St. Luke's Hospital, Denver (1952); Hubert W. Hughes, General-Rose Memorial Hospital, Denver (1952).

Delegate to the American Hospital Association: Mgr. John R. Mulroy, Catholic Hospitals, Denver.

Alternate: Herbert A. Black, M.D., Parkview Hospital, Pueblo.

STANDING COMMITTEES

Auditing: R. W. Footow, Chairman (1949), Colorado General Hospital, Denver; Rev. E. J. Friedrich (1950), Lutheran Sanatorium, Wheatridge; Karl Mortenson (1951), St. Luke's Hospital, Denver.

Constitution and Rules: Samuel S. Golden, M.D., Chairman, Beth Israel Hospital, Denver; Henry H. Hill, Weld County Hospital, Greeley; Sister M. Johanna, Sacred Heart Hospital, Lamar.

Legislative: Mgr. John R. Mulroy, Chairman, Catholic Hospitals, Denver; DeMoss Taliaferro, Children's Hospital, Denver; Carl Ph. Schwalb, Denver; Herbert A. Black, M.D., Parkview Hospital, Pueblo.

Membership: Sister M. Alphonsus, Chairman, Mercy Hospital, Denver; Roy R. Prangley, St. Luke's Hospital, Denver.

Resolutions: Walter G. Christie, Chairman, Presbyterian Hospital, Denver; Carl Ph. Schwalb, Denver.

Nominating: Mgr. John R. Mulroy, Chairman (1949), Catholic Hospitals, Denver; Herbert A. Black, M.D. (1950), Parkview Hospital, Pueblo; C. S. Blumel, M.D. (1951), Mount Airy Sanatorium, Denver.

Program: George A. W. Currie, M.D., Chairman, University of Colorado Medical Center, Denver; Roy Anderson, Presbyterian Hospital, Denver.

Nursing: DeMoss Taliaferro, Chairman, Children's Hospital, Denver; Sister M. Hugolina, St. Anthony Hospital, Denver; Margaret E. Paetznick, Director of Nurses, Denver General Hospital, Denver; Sister Maria Gratia, R.N., Glickner Sanatorium, Colorado Springs; S. Russ Denzler, M.D., Colorado Hospital, Canon City.

Public Education: Owen B. Stubben, Chairman, Denver General Hospital, Denver; Mr. Torgensen, Longmont Hospital and Clinic, Longmont; Ward Darley, M.D., Director, University of Colorado Medical Center, Denver; Chas. Levine, J.C.R.S., Spivak.

SPECIAL COMMITTEES

Public Relations: James P. Dixon, M.D., Chairman, Denver General Hospital, Denver; Sister Mary Linda, St. Francis Hospital, Colorado Springs.

Rates and Charges: Roy Anderson, Chairman, Presbyterian Hospital, Denver; Mgr. John R. Mulroy, Catholic Hospitals, Denver; Roy R. Prangley, St. Luke's Hospital, Denver; Walter G. Christie, Presbyterian Hospital, Denver; DeMoss Taliaferro, Children's Hospital, Denver; Ben M. Blumberg, General Rose Memorial Hospital, Denver.

State Board of Health Advisory: Mgr. John R. Mulroy, Chairman, Catholic Hospitals, Denver; DeMoss Taliaferro, Children's Hospital, Denver; Herbert A. Black, M.D., Parkview Hospital, Pueblo.

Committee on Hospital Licensing Regulations and Standards: Mgr. John R. Mulroy, Chairman, Catholic Hospitals, Denver; Roy R. Prangley, St. Luke's Hospital, Denver; Owen B. Stubben, Denver General Hospital, Denver; DeMoss Taliaferro, Children's Hospital, Denver; Roy Anderson, Presbyterian Hospital, Denver.

Premature Infant Care: DeMoss Taliaferro, Chairman, Children's Hospital, Denver; Roy Anderson, Presbyterian Hospital, Denver.

Rehabilitation Center: James P. Dixon, M.D., Denver General Hospital, Denver; Mgr. John R. Mulroy, Catholic Hospitals, Denver; Louis M. Liswood, National Jewish Hospital, Denver.

Inter-Professional Council: Hubert W. Hughes, St. Anthony Hospital, Denver.

Accuracy and Speed in Prescription Service

DORR OPTICAL COMPANY

421 16th Street

Denver, Colorado

KEystone 5511



To provide the flexibility needed to adjust dosage to the individual patient's requirements, Purodigin is supplied in three strengths: Tablets of 0.1 mg., 0.15 mg. and 0.2 mg. You can rely on Purodigin to produce a constant response. The pure, crystalline, orally active glycoside—not a mixture . . .

PURODIGIN[®]

Pure Crystalline Digitoxin Wyeth

**The
heart
of
the
matter**



Wyeth Incorporated • Philadelphia 3, Pa.



Detection must be early



Early vigorous treatment of diabetes increases the patient's chances for longevity. One million diabetics remain undetected in the United States.* The diabetic must be detected before it is "too late." **Selftester**—for the general public, is a simple home test for the detection of urine-sugar. Its purpose is to help discover the hidden diabetic and bring him to the physician for adequate care.



Control must be complete

A well-controlled diabetic is less susceptible to infection and acidosis. The incidence of vascular complications, retinitis, gangrene, and renal intercapillary glomerulosclerosis is reduced with vigorous control. "Too little" is the symbol of inadequate control.



Clinitest for physician and patient

Clinitest (Brand) Reagent Tablets dispense with external heating and cumbersome laboratory apparatus in the detection of urine-sugar. The tablets provide a simple, rapid, inexpensive method for adequate diabetic control resting upon the cardinal principles of diet and insulin administration guided by the urine-sugar level.

Selftester to detect → **Urine-sugar**
Clinitest to control →

*Joslin, E. P., Postgrad. Med.: 4:302 (Oct.) 1948.
 Selftester trademark
 Clinitest trademark reg. U. S. and Canada



AMES COMPANY, INC. • ELKHART, INDIANA



something in common

The impelling force is the same—
confidence—whether it guides
the patient in his choice of physician
or determines the physician's selection
of a brand of penicillin.

Only a well-earned reputation
for reliability merits this faith.
To patient and physician alike,
confidence affords peace of mind.

Lilly



Detailed information and literature
on all **PENICILLIN** PRODUCTS, **LILLY**,
are supplied through your **M.S.R.***

*M.S.R.—Lilly Medical SERVICE Representative



thousands of acres

Once grown in small patches by a few American Indians, corn has come to be a dietary mainstay with by-products of global significance.

Corn-steep liquor from the manufacture of starch increases penicillin yield when it is added to the culture media of the *Penicillium* mold. Such discoveries, which led to acceleration of penicillin production, helped decide a war and now contribute vastly to world health in peace.

Through such advances in research, the Lilly Laboratories continue to serve humanity.

Lilly

ELI LILLY AND COMPANY

INDIANAPOLIS 6

INDIANA, U.S.A.

Dangerous Perception

HUMAN beings see what they want to see, hear what they want to hear, and find what they want to find. Examples are too numerous to mention—to-wit, casualties on the range during hunting season. It is strange that a fellow hunter should look like a deer, that a lifeless elk upon close inspection is found to be without horns and to wear a saddle. Then one of the members of the party has to walk home. The pay-off of 1949 was when a huntsman ascended a tree to view the terrain and was shot for a mountain lion. His assailant even "saw him swish his tail."

And then, of course, there is Morris Fishbein who went to England to "study" socialized medicine. He saw what he wanted to see, what he and we knew he'd see—and it didn't make any difference whether he spent his time in the pubs, kissing the Blarney Stone, climbing up King Arthur's seat, sipping tea with the Queen, or jotting down notes for Dr. Pepys' Diary. Unfortunately the latter, as a matter of record, accounted for his time as far as the public was concerned. It was wadded up and thrown back at him, landing where it did the most good (or harm) during a nationally broadcast debate with a leading exponent of socialization of America. Morris' well-known wit failed him at a critical time when opposing a spokesman who had the foresight to bank his fort and load his guns. And we, the medical profession, were let down hard by the "voice," since eliminated by self-medication at the A.M.A.

More recently Oscar Ewing, the Federal Security Administrator, thought he'd better go to England to see what he wanted to see. He was smart enough not to pub-

lish a diary that would bounce. Professional politicians are clever that way, especially those who are angling for a high position behind the smoke screen of a great humanitarian "cause." So far as we know, Oscar hasn't sampled any physicians. He won't even take a chance of hearing what he doesn't want to hear; he's clever that way. Too bad the taxpayers have to pay for findings and observations that could be written by any of us before his transportation departed the shores of America! But maybe we should be thankful, for it costs less to send an individual across the sea than to ship and maintain a large hand-picked Committee on Medical Care to Washington for the purpose of "finding" what their proponents want them to find. We've had both methods now and note that they both came out with the same stuff.

Finally, one of our own Rocky Mountain boys went across the sea to see what he could see. Dr. Lloyd Florio, Professor and Head of the Department of Public Health at the University of Colorado Medical Center, feels prepared to report his findings and has recently done so to at least one group of doctors at the Colorado General Hospital, namely the Medical Research Club of the University of Colorado Medical Center. He noted the different plans in England, Wales, Scotland and Ireland, contacting representative individuals and groups from lowest to highest in social and economic brackets. Dr. Florio comments upon the infinite complexity (and complexity in government costs money) of the systems, but avers that they work. He stated that only 10 per cent of the cost of their medical care comes from employer and employee, the remainder from the general fund. No wonder the latter is in bad shape! Yet they

refer to "free" medical care. Perhaps the average citizen may be fooled at first by the term, but when he comes to his senses it is too late and the system is in. A Council decides where a doctor may practice. Is this Democracy? In return, the government "protects" his right to practice and make a living. Sounds like the days of racketeers who flourished during prohibition in America, "protecting" the small business men from bullets in their backs.

In Glasgow, the waiting line for T. and A's. is three years long, but the patient can choose his hospital! The chemists are lagging eight or nine months in being paid for their prescriptions because "pricing" is so complicated, but Dr. Florio says they are satisfied. They, the opticians, and most dentists probably have greater incomes than in pre-scheme days. Again, those who are "satisfied" are speaking for themselves, not appraising good or bad for the majority of people, and they see what they want to see. Human beings are selfish that way.

Intricacies of physicians' retirement, bonuses for specialists, recognition for special merit or accomplishments are too numerous to include in one issue of this or any other journal. We may say one thing for sure—it is not Democracy, healthful competition and individual incentive are dampened, if not stifled.

In America, the general practitioner is the man of the hour. We feel that he holds most of the answers to critics of the way we practice our profession. Most of our Society programs are directed to him, the elevation of his place and dignity of his position with us and our people. But in England, he does not even get into the hospitals! He has been "thrown out" by the specialists. Furthermore, the scheme has taken health departments out of hospitals, wrecked tuberculosis control, maternity and hygiene clinics.

In any country, lower income groups are "for" any governmental scheme or party which prevails during an era of seemingly improved financial welfare for them,

whether it is stable or not. They are reluctant to "make a change" while they are "better off than before" and their fundamental means of subsistence are "adequate." Upper income groups admit they don't get as good medical care as before; they know the difference between good and bad. Asked why they don't go to a private doctor, they say, "We're paying for it, we'll take what we're paying for." Such is a trait of human personality. Tickle it in the pocketbook and the individual jumps. Where? Sometimes right into the fire.

The above facts were derived from some recent literature and from Dr. Florio's talk. The interjections come from your Editors. We should conclude by adding that Dr. Florio speaks well, that his honesty and sincerity are evident, but his listeners gain the impression that he wants to see, read, hear, and interpret what good there is (if any) in the old-world scheme. He does state that, in his opinion, England's scheme in its present condition would not work in America. But he goes right on to say that he believes a government scheme **will** work in America. From where we sit, this is a dangerous statement to emanate from one who represents the Headquarters of our University Medical Center. The voice of a highly-placed individual readily becomes the voice of the organization he represents (remember Fishbein?). Advocacy of leftist schemes is as unhealthful a trend locally and regionally as it is nationally.

In the talk mentioned, we do not recall hearing any comment upon the spectacular growth of voluntary group health insurance in America. What could governmental compulsory insurance do **for** people that voluntary insurance cannot do better? If there is an answer, perhaps it will be forthcoming. If not, let us hope that the year 1950 will include further and overwhelming growth of the American way and that subversive elements which would beckon our country into the beginning of a Welfare State will confine their activities to the petty politics we have come to tolerate.

The Spoils of War

ONE of our colleagues has recently returned from a consultation and teaching tour of the Far Eastern Command. He has many experiences and timely comments to recount, among which is a comparison between the natives of Guam and of Okinawa. Those who live upon the former have been spoiled. Uncle Sam has paid them for the trees and the shacks actually or allegedly ruined by the conflict. As a consequence, the people are "enjoying" an unprecedented form of prosperity and independence. The material requirements are small, but the payments have been large—at least for them. They now have the largest per capita bank deposits of anywhere on earth, and they won't work! Why should they?

In contradiction, the natives on Okinawa, for some reason we do not understand, have not been spoiled. They are industrious, polite, and happy. They are building, planning, and working.

The natives of both islands are human beings, like ourselves in fundamental nature. In America, we might liken many of the present indifferent, inefficient, spoiled tradesmen to the natives of Guam. Those who still take pride in a job well done might be compared with the natives of Okinawa. One group has been spoiled by an era of easy living. The others, the quality group, have withstood it. At times, we fear that the spoiled one predominates, for human beings often slip onto paths of least resistance when the fundamental requirements of life—food, clothing, heat and, in America, transportation and maybe amusement—seem to be assured, work or no work. Pensions, unemployment compensations, and paternalism of every sort beget and nurture a generation of "soft" individuals. We in America might look toward Guam and note a state of ruination on a small scale, then turn to England for comprehension of socialism further evolved. Finally, we might look at our present national administration and the ingredients they are brewing up for catastrophe in this country if their welfare state pans out.

Back to the Orient, another bit of sage advice may be plucked from the Japs: They tell us that before the war and during its early stages they got technical advice from the Germans—for a price, in labor or in kind. Now they get it from Uncle Sam for nothing! Must we spoil the Japanese also, and lose for their posterity, ourselves, and mankind the potentialities of an industrious people for useful and productive work?



A Turn to the Right

A BIT of good philosophy was propounded recently at the Public Relations Conference at American Medical Association headquarters. Dr. Donald B. Koonce of Wilmington, N. C., chairman of the public relations committee of his state medical society, told of his public relations program. He said, "President Truman deserves all the credit. If it had not been for the imminent danger of compulsory health insurance, it would have been physically and financially impossible to take the rapid steps in public relations we have."

Dr. Koonce spoke wisely. Many of us have not realized that without the growing active threat of socialized medicine our public relations program and educational activities would never have evolved to their present status. We have answered the threat and have risen from the passive state within a year, and aggressive momentum has been attained. Our educational program takes its place in the national picture which is showing the people that no country can tax and spend itself into a solvent Utopia.

Actual figures are beginning to make an impression on John Q. Public. When he notes the fact that one President has spent more in five years than all of his predecessors from George Washington and even including F. D. Roosevelt, excluding abnormal expenses of war, he must admit that it can't go on—or else! Somehow a state of reason might be returning.

How about the people of Australia? Can it be that they, too, have seen the light! Their recent election is a ray of hope for them and for some other parts of the world.

Original Articles

IS THE PATIENT ALWAYS RIGHT?

C. PARDUE BUNCH, M.D.
ARTESIA, NEW MEXICO

Our fellow citizens in the business world use the statement, "the customer is always right" as the basis upon which they build their public relations policies. Though we would not contend that the physician could follow such a slogan as literally as the retail merchant, we like to use the time-proven motto as a basis for stimulating thought about medical public relations. One of the duties of the newly-formed Board of Supervisors of the New Mexico Medical Society is to "conduct a continuous educational campaign within the profession concerning personal and public conduct and the interpretation of medical ethics." All of us agree that any public relations program of the A.M.A. or a State Society will succeed to the extent that the individual doctors are alert to the health needs of their patients and their communities and manifest sympathetic interest, diagnostic acumen, and therapeutic skill motivated by a sincere desire to help. From this point of view the patient is "always right" in the sense that the doctor must begin his attempt to help the patient at the point where he finds him, even if it means silent acquiescence when the patient blurts out his "diagnosis," ideas as to best treatment and ultimatums as to what procedure he will or will not have done on him.

Though this may mean we "swallow our pride" or take more time in approaching the solution of the patient's problem it is basic that we evaluate the patient's own attitude toward his complaint and consider his various prejudices. It is a mistake to urge immediate surgery when the patient is very obviously "knife-shy"—"throw the book" at the patient so far as an expensive series of laboratory and x-ray

studies go when he has stated his hesitancy to get deeply involved financially at the time, or make the even more serious error of patting little Johnnie on the back and telling "Momma" "there's nothing wrong with him," when she has made it clear by her anxiety that she will not be satisfied with anything less than a blood count to see if he is anemic. A little tolerance with the patient's devotion to "Vicks" on the first visit or two may win the patient's confidence and eventually enable the doctor to help him more than a dogmatic statement that "all patent medicines are the bunk," even though the physician feels the home remedies are doing no good.

So let us grant that the "patient is always right" to the extent that we take him at his own level, thus recognizing that "the first essential is to gain (the patient's) confidence, and to determine quickly (his) mental attitude. Considerable tact and frequently an enormous amount of patience are required." If there are any physicians who are satisfied with the "status quo" of medical public relations, let them take warning from the various surveys that have been made and let them recall that the cultists are actively working to improve their position, that pressure groups continue to fight for federal control of the private practice of medicine in this country.

I. The Problem

Let us examine the most commonly expressed complaints of the public against the profession. An article, "Cured by Clinics," that appeared several years ago in the Reader's Digest expressed very forcefully the reaction of a former social worker as she submitted to the hours of waiting in long lines, the interminable routine questioning by clerks who never raised their eyes to

*Chairman, Public Relations Committee; Member, Board of Supervisors, New Mexico Medical Society.

the patient, the herding of patients into rooms together where indifferent nurses weighed them in, had them undress "with not a word or human touch in the process." The doctors, when they finally saw the patients, were indifferent and callous to the feelings of individual patients.

Dr. Grover Powers in his address on Humanizing Hospital Experiences criticizes our over-mechanized hospital routines.

Doctors not in clinic groups are also criticized for keeping patients waiting for hours, refusing to adopt some kind of appointment system, refusing to make night calls, failing to explain the patient's trouble and details of treatment adequately to him. Patients complain that doctors in clinics or practicing alone frequently "rush them in and rush them out" before they have a chance to discuss their health problems to their satisfaction. Many complaints are heard that certain charges seem unreasonably high, possibly twice as much as other doctors are charging. Excessive laboratory or x-ray bills result from some doctors' failure to take a full history and order additional tests discriminately.

This brief list does not cover all the complaints. Mention has been made by survey reports that the public expects the medical profession to maintain an active interest in all the health needs of the community. It is not enough that the doctor adequately care for the patients who come to him for help; people look to him to fulfill his obligation as a citizen by taking a leading part in the campaigns to improve the public health conditions of his community. "It is a mere rationalization of our lack of social responsibility to assert, as many doctors do, that we are too busy for such leadership. Other people, equally busy and in most instances far less qualified, give generously of their time and energy. Surely we cannot afford to do less for our community than our fellow citizens!"

II. Steps Toward a Solution

Whether we use the negative wording of Confucius, or the positive statement of the Golden Rule given to us in the New Testament, the thought of putting ourselves in

the position of the patient is the first step toward satisfying the complaints made by the public. Let us suggest this example: you take your car to the garage to find out why it has not been running like it should. What do you expect from the mechanic?

1. *Sympathetic interest* in your account of the trouble you have been having and a chance to tell him the story in your own way before he starts asking questions.

2. An *intelligent approach* to the difficulty shown by his careful examination of the part giving the trouble, his ability to relate that defect to the total operation of the automobile and his thorough observation of all parts of the car that may be functioning defectively to lead to further trouble in the future.

3. *Promptness* in getting to the solution of your problem and an honest estimate of how long the repair will take and the approximate cost.

4. *Personal integrity* that will give you confidence that, if he suggests a wheel-realignment or some other additional procedure, you will know that it really needs to be done.

5. *Skill and ability* as a trained mechanic so that he can do an adequate repair job and explain to you how to take care of your car.

6. *Judgment* enough to give him an understanding of the seriousness of the particular trouble and to know his own limitations so that he will refer the matter to some one else if he finds that he will not be able to handle the job, or senses that you are not entirely satisfied.

7. *Patience and understanding* in order that he will hear you out when you complain on your second visit that the same trouble has occurred again.

Can patients expect any less of their physician than you expect of your mechanic?

This year is the one hundredth anniversary of the birth of that great physician, philosopher, and pedagogue, Sir William Osler, and the following gems from his address, "Aequanimitas," will help toward the solution of our problem. Along the line

of accepting your patients at the level in their thinking at which you find them, he says: "Natural temperament has much to do with its development, but a clear knowledge of our relation to our fellow-creatures and to the work of life is also indispensable. One of the first essentials in securing a good-natured equanimity is not to expect too much of the people amongst whom you dwell."

As a reminder that we continue to be men, individuals, citizens, as well as doctors, Osler says: "Engrossed late and soon in professional cares, getting and spending, you lay waste your powers that you may find, too late, with hearts given away, that there is no place in your habit-stricken souls for those gentler influences which make life worth living."

Further ideas leading toward a solution may be found in the Christian Philosophy of Life.

The Apostle Paul did not follow the

dictum: "When in Rome, do as the Romans do," for we find this in his letter to the Romans: "As much as lies in you, live peaceably with all men." This policy, if followed consistently by all of us, would not only prevent many of our public relations problems from arising, but would eliminate all of the friction between doctors. In a chapter entitled "How to Succeed in Human Relations," Sneed elaborates on the advice given by Paul by listing these four requisites for success in the realm of human relations: the quality of friendly personal recognition, sincere and sympathetic interest, a measure of mental elasticity and tolerance, and the rare grace of *humour*.

"Is the patient always right?" Yes, in the sense that it is he, not the physician, who names that "right" road on which we approach him, meet him, and work with him, as a human personality to help him understand the points at which he very definitely is not "right" and thereby help him get well.

SOME CLINICAL VARIATIONS OF RENAL AMYLOIDOSIS*

JOSEPH C. TYOR, M.D., and HALLEN T. KUO, M.D.†

DENVER

Amyloidosis is the deposition of amyloid substance, a highly complex protein, in the tissues of the body. Primary systemic amyloidosis has been considered extremely rare, and the most common form of amyloidosis seen is that secondary to suppurative disease. With the growth of surgery, chemotherapy, and antibiotics, most of the secondary causes of amyloidosis have been removed and tuberculosis remains as its main creator. The incidence of amyloidosis as a complication of tuberculosis has been dropping over the past decade. In a review of the last 200 consecutive autopsies, at the National Jewish Hospital at Denver, only twelve cases of amyloidosis were found with an incidence of 6 per cent. This is considerably lower than other reported series where the incidence has been found as high as 25 to 30 per cent. In a study of the popula-

tion of the National Jewish Hospital, particularly those suffering from far advanced tuberculosis, empyema, and multiple draining sinuses, the routine congo red test has shown relatively few cases of amyloidosis.

While amyloid degeneration takes place in most of the organs of the body, most particularly the kidneys, liver, spleen, and adrenals, it would appear that kidney involvement is most important from a clinical point of view. Because of the great importance of renal disease in internal medicine, and because of the dropping incidence of this disease, it was thought worth while to review briefly some of the variations and patterns of renal involvement. The following case reports are those from the series of the National Jewish Hospital and demonstrate some of the variations mentioned previously.

CASE 1

M. L., a 28-year-old white housewife, was admitted to the National Jewish Hospital in 1940. Tuberculosis was first discovered in 1936 at which

*From the National Jewish Hospital and the University of Colorado Medical Center, Denver.

†Fellow of World Health Organization of United Nations.

time the patient had had cough with expectoration. Pneumothorax was instituted on the left side and a left phrenic crush was done in October, 1937, at another institution.

Her symptoms on admission consisted of a moderately severe cough which was productive of about an ounce of mucopurulent sputum. She had a low grade temperature elevation, moderate dyspnea was present with exertion, and she was quite fatigued and tired easily.

Examination on admission showed both lungs to be the seat of scattered rales, altered fremitus and percussion note. Blood pressure and heart were normal and the remainder of the physical examination was non-contributory. Chest x-ray showed scattered areas of caseation and calcification throughout the major portions of both lungs and a cavity in the left apex.

Laboratory examinations on admission showed a faint trace of albumin in the urine along with many pus and epithelial cells. The blood count was within normal limits and the blood sedimentation rate was 63 mm. in one hour.

Course in Hospital: Right pneumothorax and pneumoperitoneum were instituted but there was little clinical improvement. Cavitation developed in the left base and there was an increase in the disease on the right. Collapse therapy had to be abandoned due to the development of severe dyspnea and continuous nasal oxygen was necessary.

Marked albuminuria was first noted in 1944 and examination of the blood protein in 1945 showed a total protein of 6.4 grams, of which 2.7 grams was albumin and 3.7 grams globulin, or an A-G ratio of 1:1.4. A congo red test showed complete absorption of the dye in 1945 and the test has been definitely positive on two other occasions with complete absorption in 1947 and 90 per cent absorption in 1948. The blood non-protein nitrogen continued to be normal.

The general clinical condition of the patient did not change remarkably. The cough and expectoration with occasional low grade temperature elevations continued. Protein hydrolysate was given orally and following one month of this there was an increase in the total protein content of the blood to 8 grams but little change in the A-G ratio. Right heart failure developed and was successfully treated with mercurial diuretics and oxygen. Under this regime the edema and hepatomegaly subsided. There were periods of nausea and anorexia with weight loss. There also was still a necessity for nasal oxygen intermittently to alleviate the bouts of dyspnea. She continues to lose 6 grams of albumin per liter of urine but does not appear to suffer any deleterious effects from her renal amyloidosis which has persisted for more than four years.

CASE 2

H. B., a 26-year-old white male, was admitted to the National Jewish Hospital on May 25, 1945, with the following story:

He had been well until Christmas, 1943, at which time he had developed a cough and fever. X-ray of the chest at that time revealed active pulmonary tuberculosis and one month later a pneumothorax was induced on the right. He received weekly refills and spent about fifteen hours per day at home in bed. There was improvement in the severity of the symptoms for a time. However, in March 1945, the severity of the cough, expectoration, anorexia, and weight loss increased, necessitating hospitalization of the patient.

Examination on admission disclosed a chronically ill, white male. Significant physical find-

ings were confined to the thorax where it was noted that on the right, the percussion note was decreased over the apex posteriorly but hyperresonant elsewhere over the lung field. The breath sounds on this side were quite distant. On the left the percussion note was decreased over the apex posteriorly and bronchovesicular breathing could be heard in that area. The remainder of the examination was normal.

Laboratory examination on admission showed a negative sputum. The blood count, urinalysis, and sedimentation rate were all normal. X-ray showed right pneumothorax with several heavy pleural strands in the first and second costal interspaces. There was mottling throughout the left apex in the first and second costal interspaces. The patient was placed on bed rest for six weeks during which time he ran a low grade fever. On July 9, 1945, with the sputum now positive, a pneumothorax was induced on the left. Adhesions of the left apex were present but could not be severed. On December 31, 1945, a spontaneous pneumothorax developed on the left side necessitating the withdrawal of 600 c.c. of air on two occasions. Shortly after this, an empyema developed on the left side and pneumothorax was abandoned. The patient ran a stormy course for about six weeks after which he slowly began to improve. On August 20, 1946, a left thoracotomy was done in preparation for a thoracoplasty. The patient's condition, however, was poor. On November 16, 1946, the urine began to show much albumin, hyaline, fine and coarse granular casts and blood cells. The total blood protein fell to 4.63 grams and there was a reversal of the albumin-globulin ratio to 1:1.6. The patient lost 10 grams of albumin in twenty-four hours. Massive edema developed in spite of a high protein diet supplemented by plasma and amino acids. The patient was given thyroid in an effort to control the edema and ascites but there was little change in the general condition. Since there was only 45 per cent congo red retention it was argued that the picture may have been due to loss of protein through the drainage tube or an old chronic nephritis which had gone into the nephrotic pattern. On December 9, 1946, urea in 60-gram daily doses was then given with the production of a decided diuresis. On December 4, 1946, the non protein nitrogen of the blood was normal and one week later had risen to 106 mgm. per cent. The course was then rapidly downhill, the patient becoming comatose and expiring on December 12, 1946.

Postmortem examination revealed the lungs to be the seat of a fibrocaseous chronic pulmonary tuberculosis. A pyopneumothorax was present on the left. The right cardiac ventricle was dilated and hypertrophied and the myocardium was a brown color. The liver was enlarged and firm but grossly the liver, spleen, kidneys, and adrenals showed no evidence of amyloid disease. However, microscopic examination of the kidneys revealed the glomeruli to be swollen and contain amyloid deposits in the loops of the capillaries. Large areas of amyloid deposits were present in the spleen with smaller areas of amyloid present in the liver.

CASE 3

N. D., an 18-year-old single CCC enrollee, was admitted to the National Jewish Hospital on November 27, 1940. Past and personal history was non-contributory. The patient had felt perfectly well until October, 1939, at which time there occurred a sudden onset of fever, headache, and malaise. Two and a half weeks later a pain in the left chest developed. In November, 1939, the

left pleural effusion was tapped, and tubercle bacilli were found to be present. Artificial pneumothorax was started on the left in January, 1940, but was discontinued three months later since refills seemed to aggravate the condition of the patient. The low grade afternoon fever continued, but the patient returned home where he continued to rest. At home, his condition improved for a short time, but in September, 1940, the cough returned and was productive for the first time. There was a 9-pound weight loss, fever, marked fatigue and slight streaking.

Physical examination on admission revealed a poorly nourished, chronically ill appearing white male. There was slight clubbing of the fingers. Inspection of the thorax revealed flattening of the entire chest more marked on the left. The left chest was nearly immobile on respiration, flat to percussion, showed increased transmission of tactile, spoken, and whispered voice fremitus; and contained bronchovesicular breath sounds, and fine and medium rales over the upper one-half of the lung field. The right lung presented no abnormal findings except for fine rales anteriorly at about the fourth interspace at the mid clavicular line. Examination of heart, blood pressure, abdomen, extremities, head and neck revealed no abnormal findings. Laboratory data showed the sputum to be highly positive. The blood count was normal except for a leukocytosis of 11,000 but a normal differential. The sedimentation rate was 38 mm. The urine was heavily positive for albumin and contained a few granular casts, white and red blood cells.

X-ray of the chest showed very extensive atelectatic and fibrotic changes on the left. The heart and trachea were displaced to the left and there was slight scoliosis of the dorsal spine to the right.

Course in Hospital: Renal function studies were found to be normal except for the persistent albuminuria. Urine cultures were negative for tubercle bacilli. Congo red tests revealed 36 per cent retention of the dye. Blood chemistry showed a decrease of the total protein to 4.9 grams with 1.5 grams of albumin, 3.2 grams globulin with an A-G ratio of 1:1.2.

Attempts at aspiration of the left chest were unsuccessful but a few weeks after admission the temperature dropped to normal. On March 18, 1941, four months after the first congo red test, repeat test revealed 100 per cent absorption. Bronchoscopy showed no abnormal findings. A fungating buckshot-sized mass was excised from the frenulum of the tongue and biopsy revealed tuberculosis. This healed uneventfully. Without definitive surgery, it was felt that the condition of the patient would be hopeless. Accordingly, a seven-rib thoracoplasty was completed on August 11, 1942, after which the patient gained weight and strength and felt much improved clinically.

Three months after surgery, the albuminuria began to decrease in amount and one year after surgery, the urine was perfectly normal. The blood protein rose to 5.2 grams with 3.8 grams albumin and 1.4 grams globulin or an A-G ratio of 2.7:1. The sedimentation rate and blood count also became normal and the sputum was nearly converted. The patient was gotten up on activity and gradually rehabilitated while continuing to feel well and gain strength. Although there had not been a complete conversion of the sputum, the white blood count and sedimentation rate gave indications of a well encapsulated process not producing toxemia. It was therefore decided that it was not advisable to undertake the risk of further surgery.

Comment

The exact etiology of amyloidosis is as yet unknown. In a recent series of cases at the National Jewish Hospital on whom congo red tests were done, all of the patients had severe far advanced pulmonary tuberculosis. Many of these patients were suffering from empyema and draining sinuses. Yet only one patient was found in whom the diagnosis of amyloidosis could be made. One may argue that the available clinical tests are not sufficient to diagnose this disease. However, even at postmortem, very few cases of amyloidosis were found. Better control of tuberculosis may be a factor in decreasing the case of amyloidosis, but again, many patients who died with advancing cavity disease showed no evidence of amyloid disease at necropsy. Perhaps there is a not yet understood factor in the production of amyloid which is set in motion by the primary disease. One may postulate that there may be in some individuals an inherent weakness of the reticulo-endothelial system which makes them susceptible to amyloid disease. This weakness therefore in the presence of disease which causes marked destruction of tissue protein may then allow the patient to become a victim of amyloidosis.

It is seen that renal amyloidosis may follow many pathways. Thus in the first case there has been severe albuminuria for 4½ years with almost 100 per cent congo red retention. With the exception of a bout of right heart failure successfully treated with oxygen and mercurial diuretics, there has been no remarkable change in the condition of the patient. There is no evidence of a developing uremia as the blood non protein nitrogen remains within normal limits of about 35 mgm. per cent. There is no evidence of a nephrotic syndrome. It may be postulated that if she does not die of her tuberculosis she will some day develop renal insufficiency and die in uremia of renal amyloidosis.

In the second case presented, the patient developed a malignant amyloid nephrosis which progressed rapidly to renal failure and exitus. This case illustrates adequately that amyloid nephrosis may in some cases

cause death from renal insufficiency. This patient not only showed the entire nephrotic syndrome but also nitrogenous retention. He obviously died in uremia. Also of interest is the fact that in spite of the amyloidosis proved at autopsy, there was only 45 per cent absorption of the congo red which is not considered to be diagnostic of amyloid disease. It may also be seen that amyloid nephrosis is not a true nephrosis which implies tubular degeneration but is primarily a dysfunction of the glomeruli due to extensive deposits of amyloid. Also it is to be wondered whether or not the administration of urea for diuresis did not hasten the demise of the patient. Why the amyloid nephrosis should have progressed so rapidly in this patient and in the first case should remain at a very stationary point is a fascinating question which certainly cannot be definitely answered at this time.

The third interesting point about renal amyloidosis is that it may be reversible at least in the early stages. Thus in the last case history reviewed there was complete remission of the renal amyloidosis after the control of the patient's tuberculosis by thoracoplasty. This patient, in all probability, had an amyloid nephrosis. He had amyloid disease as evidenced by the complete absorption of congo red from the blood stream, massive albuminuria, decrease of total protein with reversal of the A. G. ratio. Although it is sometimes difficult to distinguish the nephrotic phase of glomerulonephritis from true nephrosis, the absence of a history of onset of nephritis with its attendant signs, normal eyegrounds, normal blood pressure, as well as the positive congo red test all point to amyloid nephrosis. Arteriolar nephrosclerosis is unlikely in this case in the absence of hypertension and the relative youth of the patient.

It is thus interesting to note that after definitive therapy and control of the primary disease, the urinary findings and nephrotic pattern becomes reversible. It is unfortunate that this patient is not available for repeat congo red studies and gingival biopsy so that it could be seen if actual decrease in the amyloid deposits had occurred.

Summary

1. Three cases of pulmonary tuberculosis are presented with contrasting clinical patterns of renal amyloidosis.

2. Emphasis is laid on the decreasing incidence of this complication and the need for its careful consideration.

REFERENCES

1. Cecil, R. L.: A Textbook of Medicine, 943, 6th ed., 1944.
2. Cohen, S.: Amyloidosis Complicating Tuberculosis, *Ann. Int. Med.* 19:990, 1943.
3. Iverson, L., and Morrison, A. B.: Primary Systemic Amyloidosis, *Arch. Path.*, 45:1, 1948.
4. Sanders, J.: Waxy Degeneration, *Month. Jr. Med. Sci.*, XVIII, 185, 1854.
5. Dickinson, W.: Allbutt's System of Medicine, 1897, Vol. 4, the Macmillan Co., New York, p. 269.
6. Fagge, C.: The Principles and Practices of Med., 1883, Vol. 2, P. Blakiston's Son and Co., Philadelphia, p. 487.
7. Rosenblatt, M. B.: The Clinical Manifestations of Amyloidosis, *Ann. Int. Med.*, 8:678, 1934.
8. Saleeby, E. R.: Question of Existence of Amyloid Casts, *Jr. Am. Med. Assoc.*, lxxiv, 344-345, 1925.
9. Rosenblatt, M. B.: Amyloidosis and Amyloid Nephrosis, *Am. Jr. Med. Sci.*, clxxxvi, 558-567, 1933.
10. Herringham, W. P.: Kidney Diseases, 1912, Oxford University Press, London, p. 349.
11. Gibson, in Beattie, J., and Dickinson, W.: A Textbook of General Pathology, 1908, P. Blakiston's Son and Co., Philadelphia, p. 62.
12. Jacobi, M., and Grayzel, H.: Generalized Secondary Amyloidosis, *Jr. of the Mt. Sinai Hosp.*, 12:339, 1945.
13. Jaffee, R. H.: Amyloidosis Produced by Injections of Proteins, *Arch. Path. & Lab. Med.*, 1:26, 1926.
14. Letterer, E.: Recent Investigations Concerning the Development of Amyloidosis, *Virchow's Arch. f. Path. Anat.*, 293:34, 1934.
15. Grayzel, H. G., Jacobi, M., Maslow, H., and Warshall, H. B.: Experimental Studies of Amyloidosis, *Proc. Soc. Exper. Biol. & Med.*, 28:172, 1930.
16. Grayzel, H. G., Jacobi, M., Warshall, H. B., Bogin, M., and Bolker, H.: Amyloidosis: Experimental Studies, *Arch. Path.*, 17:50, 1934.
17. Altrow, H. O., von Wankle, C. C., Maly, H. W., and Williams, L. E.: Renal Amyloidosis, *Arch. Int. Med.*, 56:944, 1935.
18. Bennhold, H.: Excretion of Intravenously Injected Congo Red in Different Diseases, Especially Amyloidosis, *Deutsch. Arch. F. klin. Med.*, 143:32, 1923.
19. Friedman, M., and Auerbach, C. Jr.: *Lab. and Clin. Med.*, 21:93, 1935.
20. Taran, A.: *Jr. Lab. and Clin. Med.*, 22:975, 1937.
21. American Trudeau Society: *Am. Rev. Tuberc.*, 45:103, 1943.
22. Selkoff, I. J.: The Significance and Interpretation of the "Doubtful" Congo Red Test, *Quart. Bull. Sea View Hosp.*, 8:194, 1946.
23. Selkoff, I. J.: Diagnosis of Generalized Amyloidosis by the Congo Red Test: Definitive Diagnostic Criteria, *Am. Jr. Med. Sci.*, 213:719, 1947.
24. Selkoff, I. J., and Robitsek, E. H.: Gingival Biopsy for the Diagnosis of Generalized Amyloidosis, *Quart. Bull. Sea View Hosp.*, 8:310, 1946.

Carefully documented studies on the use of streptomycin in clinical tuberculosis have established the fact that this new anti-bacterial agent exerts a beneficial therapeutic effect on several forms of tuberculosis. At its best, however, it is only an auxiliary part of the general treatment in most forms of the disease, and is partially dependent, for its full effect, upon other more common therapeutic measures, such as bed rest, pneumothorax, and chest surgery. (Recommendations of the Subcommittee on Streptomycin of the Expert Committee on Tuberculosis of the World Health Organization, January, 1949).

AN EASILY CONSTRUCTED, INEXPENSIVE RUBBER WALKING HEEL

MURRAY E. GIBBENS, M.D.*
FORT LOGAN, COLORADO

During my Army experience, rather early in the late war it became necessary to obtain some type of inexpensive walking cast for patients in a station hospital. At that time there was no provision for a "walking heel" in the Army Medical Supply Department. Dr. John A. Caldwell, in his fracture manual, had suggested that an ordinary shoe rubber heel might be used for a walking cast. The application of such a rubber heel has been satisfactorily worked out and successfully used in Army Station Hospitals (Camp Barkeley, Texas, and Camp Gruber, Okla.) over a period of five years. I have also used these heels in civilian practice and in the Veterans Administration during the past two years.

The advantages of this type of rubber heel for walking casts are as follows: 1. The shoe rubber heel is flat, approximately 3"x 3"x 3/4", and it provides better balance and traction and more stability than the ordinary walking iron. 2. It is lighter than the usual walking iron, and is less prone to tear up bed linens, floors, and rugs. 3. It is less likely to slip on wet or smooth floors. 4. It is inexpensive and easy to construct from readily available materials. 5. After use, the heel may be cut from the cast and used again.

Construction of the Rubber Walking Heel

1. Place a 30 to 34 inch length of coat hanger wire through an ordinary rubber heel, as in Fig. 1. Use a rubber heel 3/4 to 1 inch thick. A hole for the wire may be easily drilled through either side of the heel with the leather punch on a Boy Scout knife.

2. Nail the heel to a block of soft wood, measuring 4 or 4 1/2 inches long, and the same width as the heel (see Fig. 2). The thickness of the wooden block should be 3/4 to 1 inch. Use ordinary shoemaker's tacks, and a nail punch.

*The author is Chief of Orthopedic Surgery, Veterans Administration Hospital, Fort Logan.

Application of the Rubber Heel to the Plaster Cast

1. A boot plaster cast is constructed and allowed to set. It should be applied with the sole of the foot at right angles to the leg. The back of the cast and the sole of the foot should be reinforced with a plaster splint placed longitudinally, and the cast should extend beneath the toes (Fig. 3). I prefer a minimum of padding, with perhaps a double or triple thickness of sheet wadding about the bony prominences of the ankle, frequently over a single thickness of stockinette. Also, I find that the easiest method for the application of such a cast is with the patient in the prone position on a table, with the knee flexed at a right angle. One assistant is usually required to steady the leg and foot. It is also his duty to keep the foot at a right angle to the leg. In this position the calf muscles are easily relaxed, and there is little difficulty in preventing an equinus position of the foot. Care should be used to make the cast as high as possible, up to the bend of the knee, when using this method.

2. After the boot plaster cast has "set," or hardened for a few minutes, the rubber walking heel may be applied (or, if preferred, it may be applied on the following day). The wires are bent to conform to the contour of the cast, as in Fig. 4. The ends of the wires are usually bent downwards in a tiny loop. The heel is set slightly forward, partially under the instep, for better balance.

3. Small pieces of wet plaster bandages are then doubled up and wedged in between the protruding corners of the wooden block and the sole of the cast. The walking heel is then firmly anchored in place by wrapping with wet plaster bandage about the wires, and also over the corners of the wooden block, as shown in Fig. 5. One or two rolls of four-inch plaster is usually sufficient for this operation.

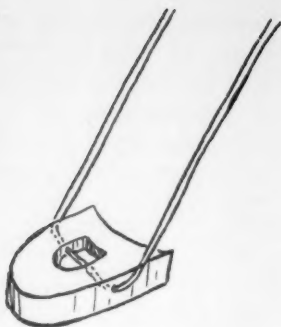


Figure 1.

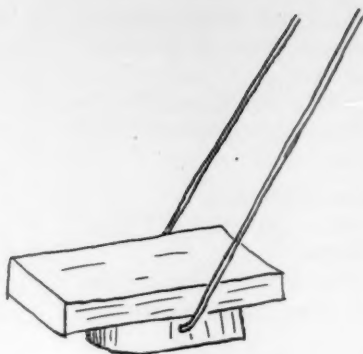


Figure 2a.
Top View

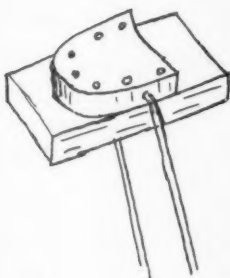


Figure 2b.
Bottom View

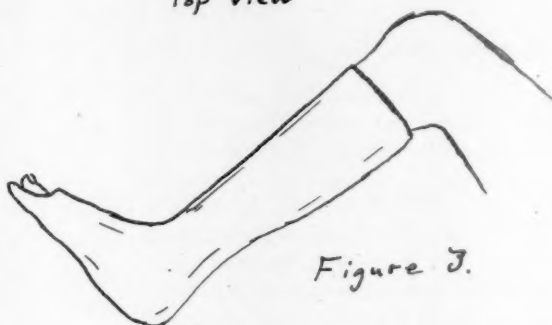


Figure 3.

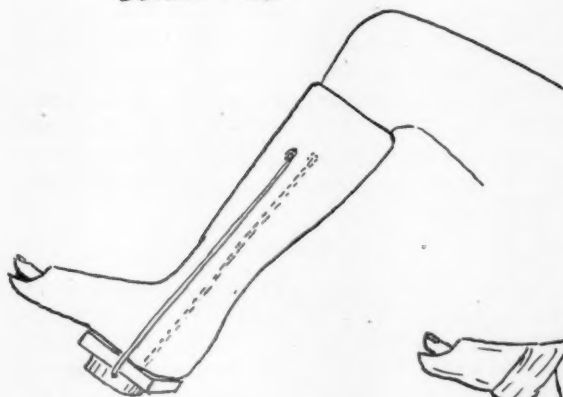


Figure 4.

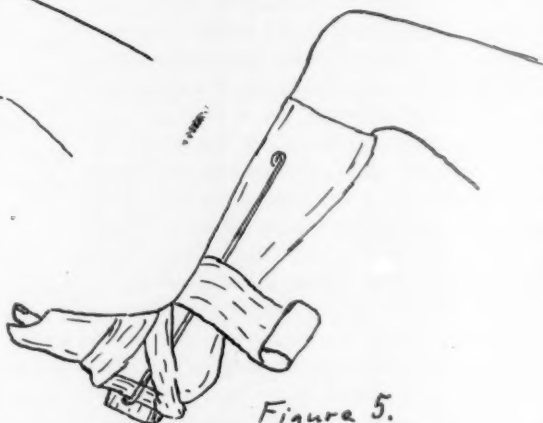


Figure 5.

In closing, it may be well to review the indications and contra-indications for walking plaster casts.

Indications

1. Any linear fracture about the ankle or

foot, requiring immobilization, in which weight-bearing would not be likely to cause displacement or excessive discomfort.

2. Partially healed fractures (usually after three or four weeks), requiring further

immobilization, in which weight-bearing would not be likely to cause displacement or excessive discomfort.

3. Long, oblique fractures about the distal fibula, with minimal displacement, and little or no swelling.

Contra-indications

1. Swelling of ankle and/or foot, of moderate to severe degree.

2. Any bimalleolar or trimalleolar, acute fracture, in which there is displacement or

swelling. These fractures must be properly reduced, and partially healed, before the use of a weight-bearing cast is allowed.

REFERENCES

1. Caldwell, John A.: A Manual of the Treatment of Fractures. Springfield, Ill., Charles C. Thomas, 1941.
2. Cooperative Committee on Fractures: Primer on Fractures. Chicago, American Medical Association.
3. Geckeler, Edwin O.: Plaster of Paris Technic. Baltimore, Williams & Wilkins Co., 1944.
4. Key, J. A., and Conwell, H. E.: The Management of Fractures, Dislocations and Sprains, Ed. 4. St. Louis, C. V. Mosby Co., 1946.
5. Magnuson, P. B.: Fractures, Ed. 4. Philadelphia, J. B. Lippincott Co., 1942.
6. Speed, Kellogg: A Text-Book of Fractures and Dislocations. Philadelphia, Lea & Febiger, 1935.

TICK PARALYSIS IN NORTHWESTERN UNITED STATES AND BRITISH COLUMBIA*

W. L. JELLISON, Ph.D., Hamilton, Montana, and J. D. GREGSON, M.S., Kamloops, British Columbia

Cases of an acute ascending motor paralysis in children and adults caused by the attachment and feeding of the female Rocky Mountain wood tick, *Dermacentor andersoni* Stiles, have been observed and recorded in the Northwestern States and British Columbia almost yearly since 1903. The tick factor in causation of these cases has led to popular and medical use of the name "tick paralysis" for the disease.

Even though there is a widespread knowledge of this disease and treatment consists only in removing the engorging tick with antiseptic precautions, fatal cases continue to occur. In 1946, in two instances, the ticks responsible for the death of the patients were found and removed by morticians. In 1947 there was one death in the State of Washington. In this instance the paralysis had progressed too far before the tick was discovered and removed. Another fatality for 1947 was reported in British Columbia.

In tick paralysis areas, established residents are usually familiar with the disease and sometimes incipient cases are treated at home by removing the offending tick, without consulting a physician. In fact, in homes in rural districts search for ticks as a precautionary measure often is part of the

daily routine during the "tick season." Certainly some cases treated by physicians are not reported to health authorities, as tick paralysis is not classed as a notifiable disease.

There has been much speculation as to the exact etiology of tick paralysis and some experimental work had been done in an attempt to determine this point. The most acceptable hypothesis is that a neurotoxin generated by the salivary glands is injected into the tissues by the female tick in its feeding process. There is no evidence that an infectious agent is involved in the type of tick paralysis found in the area here considered. The writers have nothing new to contribute on this phase of the problem which has been discussed by Mail and Gregson¹.

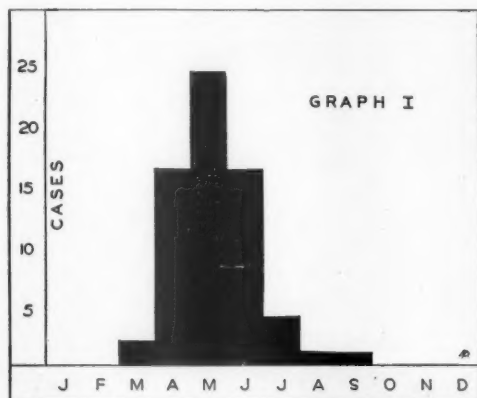
Source of Data

Published and unpublished reports on 195 cases of tick paralysis are on file at the Rocky Mountain Laboratory of the United States Public Health Service at Hamilton, Montana, and at the Dominion Entomological Laboratory at Kamloops, British Columbia. Some of these case reports are quite complete, others are extremely sketchy. However, they are sufficient for an analysis that gives a rather general picture of the seasonal, age, sex, and annual incidence of the disease, and of its geographical distribution.

*Presented at the International Northwestern Conference on Diseases of Nature Communicable to Man, August, 1947. Technical Publication No. 2599 of the Department of Agriculture, Canada. Dr. Jellison is Parasitologist at the Rocky Mountain Laboratory, Public Health Service, Hamilton, Montana. Mr. Gregson is Officer in Charge of the Livestock Insect Laboratory, Canadian Department of Agriculture, Kamloops, British Columbia.

Seasonal Incidence

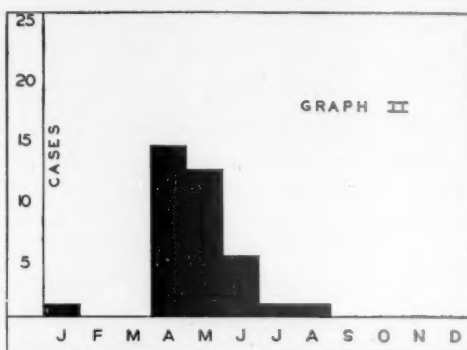
Within the range of the Rocky Mountain wood tick, tick paralysis is predominantly a spring and early summer disease, this being the period of greatest activity of the adult ticks. These appear soon after the snow and frost leave the ground in the spring and cling to grass or low shrubs waiting for hosts. They enter aestivation with the onset of hot, dry weather. Few ticks are to be found active in this region after July 1, except at high altitudes. However, cases of tick paralysis have been reported for each month from March through September, and a single January case has been recorded in British Columbia. The sixty-four cases in the Northwestern States (Graph I), recorded by date of onset, show the following incidence by months: March—2, April—16, May—24, June—16, July—4, August—1, and September—1. Fifty-six of the sixty-four cases, or 87 per cent, occurred in the three spring months; the greatest number occurred in May. Of the thirty-six Montana cases, thirty-two were in April, May and June.



Graph I. Distribution by month of 64 cases in Western United States.

British Columbia (Graph II) has had a slightly greater incidence of cases in April than in May, presumably because the season is more advanced in the affected part of that province than in the Northwestern States. Cases in that province have been distributed as follows: January—1, April—14, May—12, June—5, July—1, and August—

1. Thirty-one of the thirty-four cases with a recorded date of onset were in the three spring months. Detailed information on the January case was not given by Todd², who published the record. Active ticks are sometimes found in midwinter on wood (in or under the bark) or animal furs brought into the home and cases of spotted fever from tick bite in December and January have been attributed to ticks from these sources.



Graph II. Distribution by month of 34 cases in British Columbia.

This seasonal incidence of tick paralysis is in sharp contrast to that of poliomyelitis, which is mainly a summer and fall disease.

Age Incidence

Tick paralysis is most frequently observed in children, particularly those under 7 years of age. An occasional case is reported in an adult, but these are definitely the exception in the Northwestern States, though more common in British Columbia. The age incidence among children is as follows:

In the Northwestern States only six cases have been reported in adults. One was a female, age 22, the other five were males, 45, 45, 52, 55, and 60 years of age, respectively. While some of these adult cases were atypical, the diagnosis of tick paralysis appears to have been correct.

In British Columbia twelve adult cases with age data have been recorded. The ages of these patients were: 18, 28, 40, 40, 42, 43, 50, 50, 50, 50, 70, and 76. Only two of these were in females, aged 50 and 76, respectively. Another adult female case was recorded but the exact age was not given.

Seven other cases were recorded as adult males without definite age data.

Age	Northwestern States	British Columbia
Under 1 year.....	0	0
1 year.....	4	0
2 years.....	10	8
3 years.....	12	10
4 years.....	14	9
5 years.....	10	9
6 years.....	2	4
7 years.....	3	0
8 years.....	0	3
9 years.....	1	1
10 years.....	1	4
11 years.....	1	1
12 years.....	0	0
13 years.....	2	0
14 years.....	0	0
15 years.....	0	1
Totals.....	60	50
Children, no exact age given..	10	19
Totals	70	69

There are very limited clinical data that suggest a logical explanation for this rather restricted age incidence. Obviously babies less than 1 year of age are not out of doors as much as older children, and experience a protection and daily care that would not favor tick attachment or engorgement. Mention should be made of two cases in "infants" recorded by Todd². Both were from Fernie, British Columbia, about 1898 and it is possible these patients were 1 or 2 years of age, or even older. Children 8 years of age or older have as much or more exposure to ticks as those from 3 to 7, but would also be more conscious of ticks and more likely to remove them when found on their clothing or bodies.

Sex Incidence

The available data on sex incidence are tabulated below. Among the children about twice as many females as males were affected. However, of the twenty-six cases reported in adults, with sex data given, twenty-two were in males and four in females.

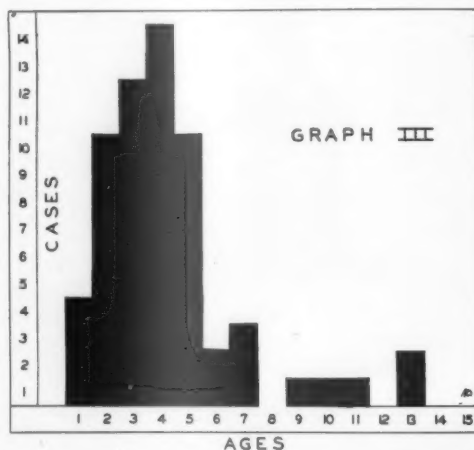
The predominance of cases in female children has been attributed to the fact that the long hair of girls affords a better protection and concealment for the engorging ticks, particularly in the occipital region which is a favored site for attachment.

	Females	Males	No Set Data	Total
Northwestern States				
Children	42	20	8	70
Adults	1	5	0	6
No age data.....	12	5	1	18
British Columbia				
Children	30	12	27	69
Adults	3	17	1	21
No age data.....	0	0	11	11
Totals	88	59	48	195

On the basis of out-of-doors activity it would be expected that boys would have the greatest exposure to ticks and experience more tick bites. This factor is undoubtedly responsible for the greater number of cases in adult males (twenty-two cases) than in adult females (four cases).

Annual Incidence

The annual incidence of tick paralysis appears to be rather irregular and is plotted in Graph V and Graph VI for the years 1915 to 1946, inclusive. Earlier records are very incomplete. Greater numbers of cases were reported in the Northwestern States for the years 1929 (7), 1930 (7), 1933 (5), 1937 (7), 1939 (8), and 1946 (7), than in other years. The yearly average for the thirty-two years has been about two cases.



Graph III. Age distribution of 60 cases in Northwestern United States.

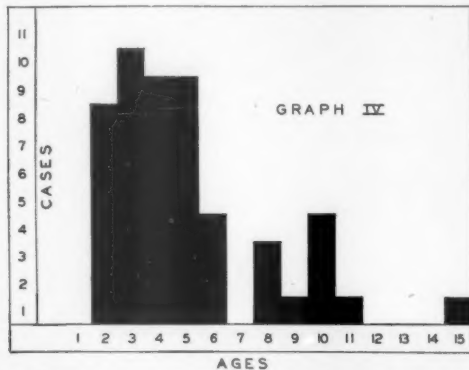
In British Columbia, 1930 with nine cases, and 1939 with seven cases, were years of high incidence in that province.

The years of high incidence of tick paralysis have not been related to years of high spotted fever incidence in Western United States.

The occurrence of seven cases with two deaths in 1946 is ample proof that the disease is still a subject for concern in the Northwestern States and British Columbia.

Geographical Distribution

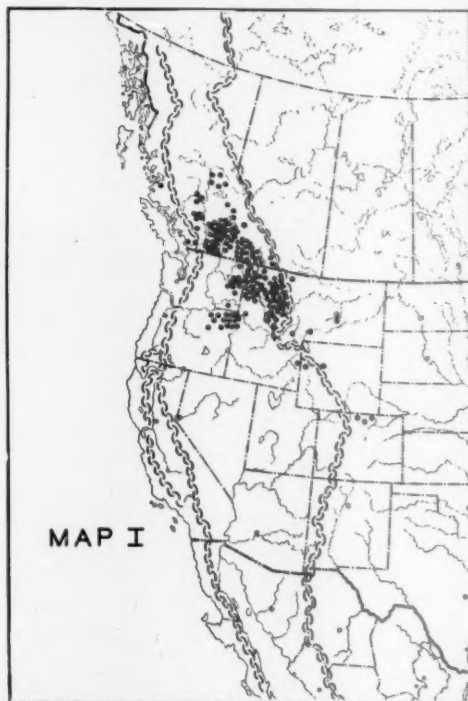
Tick paralysis in western North America is largely limited to western Montana, northern Idaho, northeastern Oregon, eastern Washington, and the southern half of British Columbia. Two cases were reported from Colorado in 1939 and one in 1940. One case was reported from Wyoming in 1930 and another in 1946.



Graph IV. Age distribution of 50 cases in British Columbia.

Since the disease in this region is caused only by *Dermacentor andersoni*, with the exception of one case attributed to *Haemaphysalis cinnabarina*, by Todd⁴, and since the disease is not considered to be infectious or to have a vertebrate reservoir of any kind, a logical assumption would be that the geographical distribution of the disease should coincide with the geographical distribution of the tick. Reference to Map I, Distribution of Tick Paralysis in Western North America, and Map II, Distribution of *Dermacentor andersoni*, clearly shows that this is not true. In fact, most reported cases of paralysis are concentrated in the northwestern portion of the range of this tick, while cases have been rare or absent in the eastern and southern portions of its range, even in areas where ticks are abundant and

spotted fever cases are common. The tick occurs essentially throughout the States of Utah and Nevada, in northern Arizona and northern New Mexico, and in northeastern California and southward in the Sierras. Paralysis cases have not been reported from these five states. About two-thirds of Colorado is within its range, yet only three cases have been reported from this state and these were from northern counties. While ticks are abundant throughout Idaho, the greatest incidence of spotted fever is in the southern part of the state, but paralysis cases have been reported only in the four northern counties. Oregon cases have been reported only in the northeastern counties, and Washington cases have been distributed mainly along the eastern boundary. The scarcity of tick paralysis in these regions certainly cannot be attributed to lack of tick bites.



Map I. Geographical distribution of 170 cases in Western North America.

The number of cases per state and year of first report are shown in the following table:



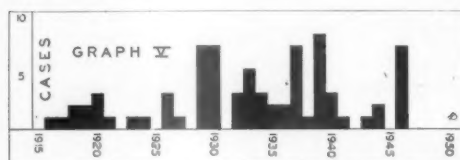
Map II. Geographical distribution of *Dermacentor andersoni* in Western North America.

Paralysis cases in Montana have been more numerous west of the Continental Divide, while spotted fever cases have been widely distributed throughout the state.

State	Year of First Reported Case	Total Number of Cases
Colorado	1939	3
Idaho	1909	19
Montana	about 1904	44
Oregon	1903	15
Washington	1903	11
Wyoming	1930	2
Total		94

One hundred one tick paralysis cases have occurred in southern British Columbia. These are more cases than have been recorded for all the Northwestern States, yet only two cases of spotted fever are recorded for that province, and these were near the southern boundary. Nearly all of the British Columbia tick paralysis cases have occurred between the coastal range and the Rocky Mountains, in the valleys of the

Fraser, North Thompson, Okanagan, Columbia, and Kootenay Rivers. The most northerly case was at Barkerville, about 300 miles north of the boundary, which is probably near the northern limit of distribution of the wood tick. Many cases have occurred near Kamloops, yet spotted fever cases have not been reported in that vicinity. Three cases have been reported west of the coastal range at Bella Coola, no date given, Rosedale, 1910, and Vancouver, 1904, respectively, which are well beyond the known range of the wood tick. These early case reports were published by Todd^{2,3} and only very meager details were given. It is reasonable to assume the ticks may have been acquired elsewhere, even if the diagnosis of tick paralysis was correct.

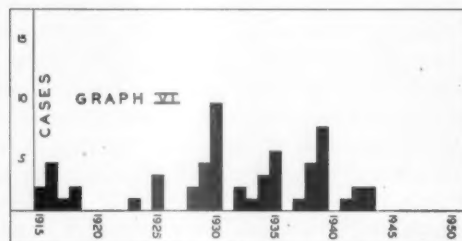


Graph V. Distribution by years of 75 cases in Northwestern United States.

This concentration of tick paralysis cases in a rather restricted part of the range of the "vector" tick species is one of the most peculiar features in the epidemiology of the disease.

Summary

Tick paralysis is a form of acute, ascending, motor paralysis which occurs during feeding of some female ticks (*Dermacentor andersoni*). The usual site of tick attachment is in the scalp, especially in the occipital region. Ninety-four cases of tick paralysis have been recorded in Northwestern United States and 101 in British Columbia.



Graph VI. Distribution by years of 56 cases in British Columbia.

The Rocky Mountain wood tick, *Dermacentor andersoni* Stiles, is the tick responsible in this area. Most of the cases occur in April, May and June, which is the period of greatest activity of the adult ticks. The highest incidence is in children 3 to 7 years of age. Nine cases have been recorded in persons between the ages of 15 and 46, nine cases in older persons, ages 46 to 76; eight other cases have been recorded in adults without age data.

The incidence of cases by years from 1915 to 1946, inclusive, shows a marked and irregular variation from none to sixteen

cases with an average of about 4.3 cases per year. Years of high or low incidence do not occur with sufficient regularity to suggest any cyclical or predictable trend.

The area where tick paralysis cases occur is rather sharply limited, in contrast to the much wider distribution of *Dermacentor andersoni*.

REFERENCES

- ¹Mail, G. A., and Gregson, J. D.: Tick Paralysis in British Columbia, Canadian Medical Association Journal, 39:532-537; 1938.
- ²Todd, J. L.: Tick Bite in British Columbia, Canadian Medical Association Journal, December, 1912.
- ³Todd, J. L.: Tick Paralysis, Journal of Parasitology, 1:55-64; 1914.
- ⁴Todd, J. L.: Tick-caused Paralysis, Canadian Medical Association Journal, New Series, 9:994-996; 1919.

THE BROADENING SCOPE OF GASTRIC RESECTION*

EDWARD S. JUDD, JR., M.D., Division of Surgery, Mayo Clinic
ROCHESTER, MINNESOTA

It has not been very many years since an operation designed to resect a large portion of the stomach was still looked upon with some misgivings on the part of clinicians and surgeons alike. For a time the operation was reserved for those unfortunate persons suffering from cancer. A distressingly high morbidity rate and a rather forbidding mortality rate were the rule. As surgeons developed better technics and became more thoroughly acquainted with the problems involved, the operation was extended to a larger group of patients. Less than two short decades ago American surgeons began hearing more and more about the then drastic efforts on the part of European surgeons to treat duodenal ulcer by an extensive resection of the stomach. This information spread quickly and the operation was performed upon certain patients who were suffering from this type of disease. As might be expected, overenthusiasm in some quarters led to abuse and forbiddingly high mortality rates were reported.

In more recent years tremendous strides have been made so that in almost all centers today radical resection of the stomach and the first portion of the duodenum are commonplace and the patient is assured of an excellent chance of recovery, which was

not the case in relatively recent times. Hence we read annual reports from many clinics indicating that the mortality rate for benign conditions which are submitted to radical gastric resection is consistently lower than 2 per cent. At the same time, the same operation applied to malignant lesions has been attended by a mortality rate of less than 5 per cent in some centers. This has led the surgeons to become bolder in their approach and has induced the clinicians to earlier appeal to surgical colleagues.

Total gastrectomy is beyond the scope of this discussion. It is rightly reserved for malignant lesions of the stomach, especially the linitis plastica type. Originally the mortality rate of the operation was around 50 per cent, but at present a figure of approximately 18 per cent is considered very acceptable.

Comparative Status of Vagotomy

Recent emphasis on previously elaborated information concerning the physiology of the stomach and duodenum has led to a world-wide discussion on the feasibility of the interruption of the vagus nerve supply to the stomach for peptic ulcer¹. It is now estimated that more than 12,000 resections of the vagus nerves have been performed throughout the civilized world. Probably

*Read at the meeting of the New Mexico State Medical Society, Roswell, New Mexico, May 5 to 9, 1949.

some of these procedures can be said to have been applied in improper situations. Certainly others can be said to have been performed with the greatest of dexterity and the most thorough exactness and yet to have been attended by results which have been far short of complete satisfaction to the patients.

Whenever there is a meeting of the minds in the surgical world today the discussion of vagotomy almost inevitably leads to an impasse. There are several schools of thought. The most outstanding enthusiasts for the operation feel that the severest critics of the operation simply have not learned how to perform it properly. On the other hand, the critics of the operation feel that the enthusiasts are performing the operation upon patients who in other centers would receive more thorough trial of medical treatment without surgical intervention. In the final analysis it is clear that the time-honored operations for duodenal ulcer have now withstood the test or been condemned by failure, in a period of at least fifteen years of evaluation. The ultimate conclusion concerning vagotomy still rests only with the test of time. Whether the late complications which have been known to follow other surgical procedures employed for the relief of ulcer will appear in the vagotomy group remains to be seen².

A thorough analysis of vagotomy has no place in the present discussion. However, serious consideration of the proper method of treatment of patients suffering with peptic ulcer will always bring up the possibility of vagotomy. A large series of patients at the Mayo Clinic have undergone a radical resection of the stomach and first portion of the duodenum for peptic ulcer, whether gastric, duodenal or gastrojejunal. In the main the results have been excellent. It is to be admitted freely that a small percentage of patients who may not have demonstrable recurrence of the ulcerations still fall short of their own and the surgeon's expectations, in that their nutrition has not been completely normal and they do not consider themselves entirely well. It also is to be admitted frankly that a cer-

tain small percentage of patients, well under 5 per cent, have had actual demonstrable recurrence of ulceration. Whether this is worse than or better than the result ultimately to be realized with vagotomy, time alone can tell. The fact remains that those surgeons who have mastered the technic and all of the ramifications involved in gastric resection for this type of disease are rather loath to abandon this method in favor of a method which to them appears inadequate.

At the present time the conscientious surgeon is careful to evaluate all reports from surgeons who are developing the field of vagotomy. It appears that vagotomy has a very definite place; namely, in gastrojejunal ulcer occurring after what was previously thought to be a completely adequate resection. Whether the vagotomy is to be performed transthoracically or transabdominally rests with the surgeon himself. It may be that in a few cases gastrojejunal ulcer occurring after gastro-enterostomy will be handled adequately by vagotomy alone. As a second-choice procedure in an extremely difficult situation, as, for example, a markedly inflamed duodenal ulcer occurring in a short, obese patient in whom the technical factors of resection would be almost forbidding, vagotomy might be combined with gastro-enterostomy. Vagotomy as a primary procedure for uncomplicated duodenal ulcer is probably to be avoided at the present time.

Uncertainty of Diagnosis

One of the most important reasons for increasing the incidence and broadening the scope of gastric resection is the present-day frank admission on the part of many clinicians and surgeons alike that there is no sure diagnostic method in dealing with gastric ulcer. One of the greatest steps forward in recent times has been the complete abandonment of the old practice of observing a gastric ulcer for a prolonged interval. Everyone has seen ulcers of this type which appear to respond to a few weeks' treatment in the hospital in that the roentgenologic findings become less marked and the gastroscopic appearance of the ulcer is en-

couraging. However, many authorities have been distressed to see patients of this type return at a later date with a hopeless carcinoma of the stomach. Recent critical analysis of diagnostic measures has led to the conclusion that the error even in ideal conditions is at least 10 or 12 per cent in diagnosis alone³. In fact, because of the lowering of the morbidity and mortality rates many surgeons are now considering gastric ulcer to be entirely a surgical problem, leaving no place whatsoever for medical therapy. Thus, the group at the Lahey Clinic are abandoning the older method and are urging patients who have gastric ulcer to undergo early surgical treatment. The argument might be advanced that if the lesion is indeed malignant the results of surgical treatment are so discouraging that there is no necessity for haste. The conscientious surgeon will argue this point vehemently, having had experience with wide resection of small malignant ulcers and having observed excellent results over a period of years.

Unusual Indications

Relatively recently it has come to the attention of the medical profession that there is yet another condition which may well indicate gastric resection. This is an entirely benign process consisting of the prolapse of the antral mucosa through the pyloric ring to the extent that complete gastric obstruction results. Usually this is a sequel of chronic hypertrophic gastritis and undoubtedly it has occurred throughout the years without being recognized. Many of the patients have gone along with the diagnosis of functional gastric disease, or a similar syndrome, but most of them have suffered from time to time unnecessarily. Recent reports have pointed out that medical therapy may play a slight role in this condition but that surgical attack is rewarded by brilliant results. Some surgeons have treated the condition by local excision of the mucosa or by pyloroplasty. A more thorough and probably more satisfactory method has been gastric resection^{4,5}. There is an increasing number of reports dealing with this problem and there is no question

that a larger number of patients will be afforded relief now that the situation has been called to the attention of the profession.

Under the heading of resections performed for questionable indications one might include gastritis. Certainly every surgeon seriously interested in the treatment of ulcer or malignant disease of the stomach or duodenum will occasionally encounter a patient who has been studied thoroughly preoperatively but at operation is found not to have actual ulcer but rather severe gastritis. Certain more radical members of the profession have performed resection for gastritis alone. This has not been the policy at the Mayo Clinic and whether it is a justifiable procedure may remain arguable. The hazard of the technical procedure in the presence of a severe inflammatory change of this nature renders the operation somewhat suspect.

An additional instance of perhaps questionable rationale is a radical gastric resection for esophageal varices. It is true that certain patients with recurrent gastric hemorrhage thought to be on the basis of esophageal varices may improve for a time after radical gastric resection, but the fact remains that there are other varices considerably above the point where the gastric surgeon is able to resect. The mere ligation of a number of vessels about the cardiac end of the stomach does not appear to be sufficient protection against recurrent hemorrhage in some of these cases.

Earlier Methods and Their Shortcomings

Only a few years ago gastro-enterostomy enjoyed wide favor as the gastric operation of choice for many lesions. It was employed occasionally in the treatment of benign gastric ulcer either with or without excision of the ulcer. That it healed many of the benign ulcers is common knowledge. That it might be expected to reduce inflammatory reaction surrounding a malignant ulcer is also entirely possible. It seemed to be an operation which was extended in some centers to those patients suffering from gastric ulcers of unknown histologic character which were located so high in the stomach that they were thought to be inaccessible.

Local excision of gastric ulcers answered the problem of eradicating the ulcer itself and determining immediately its histologic character. However, it was found, especially when the ulcer was located on the lesser curvature, that this interruption of the normal continuity, even though adequately repaired, resulted in delayed emptying or even extreme retention. It was soon learned that a gastro-enterostomy was almost mandatory in that type of procedure. This left the stomach vulnerable as far as the possible development of future difficulty was concerned, and once again this type of operation was more or less condemned in many centers.

For many years gastro-enterostomy was employed as the standard surgical treatment for duodenal ulcer. In fact, it healed such a vast majority of these ulcers that certainly many of these patients were sent to the operating room without a very prolonged trial of medical management. It was not long before all observers detected recurrent difficulty in the form of extensive gastrojejunal ulceration which might have progressed even to penetration of the colon. Reactivation of the duodenal ulcer itself was a common occurrence, especially if the gastro-enteric stoma failed to function completely. Even after perfect technic in fashioning the gastro-enteric stoma, complications were seen to develop which stimulated surgeons to seek some other type of operation for the treatment of the complicated ulcer case. The factor of gastrojejunal ulcer alone is the chief argument that is used by the exponents of the radical gastric resection method.

Pyloroplasty enjoyed a rather brief era of favor. It was a relatively simple and quick procedure which eradicated the disease process and obviated the pylorospasm and gastric retention, which might have been expected if the ulcer were simply excised. Many of these patients were rid of their disease more or less permanently, but once again the inadequate removal of gastric tissue permitted an excessive amount of highly acid gastric juice and resulted in recurrence of the peptic ulcer process.

All of these technical procedures studied in the light of final results became an ever greater stimulus to surgeons to do better in developing one procedure which could be applied to several different types of lesions without altering drastically the patient's physiologic mechanism and without leaving him vulnerable to the postoperative development of a similar process.

Valuable Adjuncts to Gastric Resection

Any discussion which concerns the broadening scope of gastric resection would be notably lacking if due attention were not paid to the many valuable measures which have been added in recent years. No field of surgery has reflected more perfectly the worth of those advances than has the gastric field. It is now more evident than ever before that the most important single item is the transfusion of whole blood. Early in World War II it was suggested that blood plasma or albumin might indeed be a valuable substitute for whole blood. However, late in the war it was apparent to all that there is no real substitute for blood. Not only are many patients who require gastric surgical treatment debilitated in regard to the hemoglobin and cell factors, but the serum protein may be lowered greatly because of the existing circumstances. There is no more valuable means available to us than preoperative transfusion, repeated freely if indicated. Blood plasma is still useful along with the refined protein products which are now becoming increasingly available not only for restoring blood volume but also for actually elevating the serum protein level. There are now numerous protein derivatives which are nearly 100 per cent protein, which can be taken by mouth and which seem to be quite effective. The restoration of the fluid balance cannot be overemphasized and the multitude of preparations, both with and without isotonic saline solution as one of the agents, bespeaks the obvious value of this factor alone.

As concerns continuous or intermittent emptying of the obstructed stomach by the nasal-tube method employing the Wangen-

steen suction principle, there is probably no part of the civilized world today which does not employ this life-saving measure. When it is combined intelligently with proper replacement of fluids, the patient is taken out of a very high-risk class as regards obstruction of the stomach and placed in a far more normal status in a relatively short time.

Postoperatively many of these same agents are equally important. It is now possible to maintain almost perfect fluid balance without relying on oral intake during the first few days. The stomach may be kept empty and the suture lines may be protected by the constant or intermittent use of the nasal tube exactly as noted prior to operation. The free use of whole blood once again makes itself felt in the greatly reduced rate of morbidity and mortality. The more complete preoperative preparation of the patient is quickly reflected in the marked reduction of necessity for postoperative transfusion and parenteral therapy. The chemical agents available to our use still play an important role. The intraperitoneal administration of sulfathiazole powder still has a wide circle of advocates. Sulfathiazole appears to attack the bacteria at the earliest possible point; namely, at the site where any soiling might have occurred during the operation. The tremendous strides in the antibiotic field have been applied to gastric surgery also. Penicillin and streptomycin are enjoying well-deserved favor. In addition to giving added protection where soiling has been a feature, they have been proved to minimize greatly pulmonary complications and urinary infection.

One cannot discuss this type of surgery without digressing to mention early ambulation. My colleagues and I are firm advocates of early rising and early walking and feel that the immediate return of muscular activity, with its attendant more complete pulmonary ventilation, greatly reduces the possibility of postoperative atelectasis and its dire sequel, bronchopneumonia. In addition, the patient will in all probability be able to void spontaneously and thus be spared the threat of urinary infection from

repeated catheterization. It would be expected that the more normal motion of the extremities would promote a more normal circulatory mechanism and perhaps reduce the incidence of thrombosis and embolism. Unfortunately this has not been the case in our experience. We employ dicumarol in those patients who might be candidates for thrombosis or embolism, whether they are on an early ambulation program or not. This includes the apprehensive patients who are afraid to move about in bed or to get up early, those patients with poor pulmonary ventilation under normal circumstances, and those who have had a history of thrombophlebitis or embolism in the past. The excellent records of those physicians interested in the proper use of dicumarol prove beyond question that thrombosis and embolism can be combated. Although we still encounter an occasional case of embolism, it serves as a warning to start the anticoagulant therapy immediately. The number of fatal emboli can certainly be reduced.

A final word regarding early ambulation concerns the psychologic well-being of the patient. There is no doubt that, if the patient is allowed to get up as early as he wishes (it will often be the night after operation), he is convinced that the surgeons are not worried about him and therefore he refuses to worry about himself. The response, as far as his subjective reaction is concerned, sometimes is almost spectacular.

Technical Considerations

The type of gastric resection most favored today is the Polya operation or some modification of it. This procedure is standardized and in many instances proves to be entirely satisfactory. It is done frequently as a "posterior" procedure, the anastomosis being attached well below the incision in the mesocolon. This allows a far shorter loop of jejunum. In fact, some surgeons divide the ligament of Treitz in order to place the anastomosis in the very first part of the jejunum. The argument is presented that in ulcer cases the uppermost part of the jejunum is more resistant to recurrent ulceration.

tion than is that part further distal. Furthermore, the exponents of this method argue that proper emptying of the gastric pouch will be far more common in a posterior procedure and that there is much less opportunity for the development of stasis and actual obstruction of the short proximal loop.

Perhaps a preferable modification of the Polya method is the addition of the Hofmeister principle, which concerns itself with closure of the lesser curvature aspect of the stomach prior to an anastomosis. There are three strong arguments in favor of this procedure: first, all of the lesser curvature may be resected, which in the cases of ulcer removes more of the acid-bearing portion and in the cases of carcinoma removes more of the potentially involved tissue; second, by closing the lesser curvature side the technical problem in anastomosis is rendered simpler because that portion of the stomach which is being employed for an anastomosis is more readily accessible; third, the employment of a smaller stoma may well mean less of the so-called dumping syndrome.

Wollaeger and his colleagues⁶ analyzed this syndrome in patients who had undergone the standard Polya type of anastomosis. They discovered an excessive loss of fat and nitrogen in the stool. The patients had lost weight and it was found that this factor could be overcome in some patients by a very high-calorie diet. In those patients exhibiting lesser degrees of the dumping syndrome after the standard Polya operation, they found that the loss of fat in the stool was considerably less than it was in those patients with the more advanced symptoms. The important loss of fat and nitrogen in the feces, Wollaeger and his associates suggested, might be on one or more of the following bases: first, the residual gastric pouch probably emptied much too quickly; second, overstimulation of the jejunum by the abnormal introduction into it of the gastric contents might accelerate movement of the contents because of the overactive peristalsis so that they rushed through the upper part of the small intestine; third, a diminished flow of both bile

and pancreatic juice probably resulted because of the diminished strength of the stimulus to their secretion produced by the altered physiologic mechanisms; fourth, the mixing of food with its digestive elements was probably entirely abnormal because of the surgical shunt of the gastric contents away from the duodenum. Wollaeger and his colleagues are undertaking a comparative study in those persons who have undergone the Hofmeister procedure. Preliminary reports indicate that the smaller stoma may indeed reduce the degree of the dumping syndrome.

In many centers the anterior type of anastomosis is employed, because it is simpler to accomplish than the posterior type, there being no necessity for dealing with the transverse mesocolon. It is felt that in addition to avoiding any threat to the midcolic vessels the patient is left with an anastomosis that is readily accessible in the event that subsequent development of gastrojejunal ulceration should take place. Whether this is a valid argument may be open to some question. The Moynihan procedure routinely places the anastomosis anterior to the colon with little regard for the length of the proximal loop and attaches the efferent limb to the lesser curvature of the stomach, a method which is in direct opposition to the standard Polya procedure. In spite of many arguments to the contrary it must be admitted that the Moynihan operation has exhibited many excellent results.

After radical gastric resection had become recognized in this country as a method of dealing effectively with peptic ulcer, warnings were sounded throughout the profession because of surgical accidents to the ampulla of Vater or the common bile duct itself. The presence of a highly inflamed duodenal ulcer usually means extreme foreshortening of the first portion of the duodenum. My colleagues and I have found the average distance from the pylorus to the ampulla to be less than 8 cm. in normal subjects. In cases of severe ulcer the distance may actually be less than 4 cm. In addition, it is found that those patients who have

undergone pyloroplasty previously and in whom recurrent ulcer has developed present a difficult technical problem because of the proximity of the vital biliary structures. Lahey frequently points out that in cases of low-lying duodenal ulcer, especially the inflammatory types, it might be well to open the common bile duct and identify the ampulla by inserting a T tube with a distal limb long enough to extend through the ampulla. More recently, various authorities are turning to the conclusion that it is not necessary to excise the ulcer itself in such dangerous situations. As long as the entire pylorus is removed they feel that the ulcer will heal in all cases and that the distressing injury to these vital structures need not occur. This in no way compares with the exclusion type of operation, in which the pylorus and a varying amount of the gastric antrum were left in place, but it does extend the benefits of radical gastric resection to many patients who might otherwise have been denied them.

A procedure that is well founded in an occasional instance, and which has not received as much recognition as it well might, is the modification suggested by Bancroft. He has pointed out that, in the situation characterized by an extremely inflammatory ulcer in the duodenum, which not only jeopardizes the common duct and ampulla but also is attended by extreme inflammatory change throughout the gastrohepatic ligament, the gastrocolic ligament and all adjacent structures, there is still a method of dealing with the problem. He divides the gastric antrum several centimeters proximal to the pyloric ring. He then deliberately opens the small gastric stump and trims out all the antral mucosa to a point just distal to the pyloric ring. This eradicates the gastrin factor of hormonal stimulation for continued gastric secretion. It still leaves intact the gastric muscularis and serosa, which can be closed over in a very adequate fashion. Although this stump may produce an odd appearance it usually is entirely satisfactory and certainly is far safer than radical excision of the region of the duodenal ulcer itself in such a situation. I have had

occasion to employ Bancroft's procedure in a few instances. The pathologist checks the strip of mucosa removed and by frozen tissue technic can immediately identify Brunner's glands, assuring the surgeon that he has proceeded into the duodenal mucosa. The results have been gratifying. Postoperatively, all of the patients have exhibited complete achlorhydria to the routine type of test meal. This one modification alone will extend the use of resection considerably beyond what was thought possible previously.

Recently there has been a revival of the Billroth I method of end-to-end gastroduodenostomy. The more common application of this procedure is concerned with closing the lesser curvature aspect of the stomach after the manner of Schoemaker. The operation had been overlooked in the intermediate years because there was such enthusiasm for an extensive gastric resection that many surgeons concluded that an end-to-end union would not be possible. The fallacy of this conclusion is made apparent immediately when one considers the very successful outcome in a few cases of total gastrectomy in which end-to-end esophagoduodenostomy not only has been possible but has been most gratifying^{8,9}. At the present time on many of the surgical services at the Mayo Clinic, the Schoemaker-Billroth I operation is enjoying rather wide application. In very recent years only, the total of these cases is now nearly 400, so that definite conclusions can be drawn. The most valuable application of the operation lies in small gastric lesions, especially those near the pylorus. Successful outcome of the procedure presupposes an easily mobilizable duodenum which is free from scarring or distortion and which lends itself well to anastomosis. It seems to be the operation of choice for a benign gastric ulcer, especially along the lesser curvature. The entire lesser curvature may be removed and the Schoemaker modification for closing the lesser curvature aspect is rather readily accomplished, especially by employing the Furniss type of clamp and pin. This leaves enough of a stoma on the gastric side to match prop-

erly with the duodenal stoma so that end-to-end union can be accomplished quite easily.

Obviously, to attempt to employ the Billroth I procedure for very extensive gastric resection in a case in which the duodenum could not be mobilized properly would be very poor practice indeed. The knowledge that esophagoduodenostomy is feasible in certain cases, combined with the experience which has demonstrated that under proper conditions it is entirely possible to resect 80 per cent of the stomach and still perform end-to-end anastomosis in rather routine fashion, has led to a very definite broadening of the scope of this type of procedure. Carcinoma of the pyloric end of the stomach may be treated in this same fashion, the entire greater omentum and most of the lesser omentum being removed. It so happens that on my own service this operation has been performed in only five cases of duodenal ulcer. Ordinarily those duodenal ulcers requiring surgical intervention will have distorted the duodenum so markedly that anastomosis will be out of the question. In the cases mentioned there was a coincidental gastric ulcer for which the operation was being undertaken. The duodenal ulcer in each case was so quiescent that it was removed easily, normal duodenum distal to it being preserved for a good union. Clagett and Priestley have extended the Billroth I procedure to a small number of cases of duodenal ulcer also in which the operation was undertaken with duodenal ulcer as a primary diagnosis.

The common experience has been that there is far less of the so-called dumping syndrome after this operation than after other types of gastric resection. This is difficult to prove, but several features immediately suggest themselves. First, the stoma is considerably smaller than that produced in the standard Polya operation as well as the Hofmeister-Polya. Second, and perhaps much more important, the gastric contents pass in almost completely normal fashion from the stomach directly into the duodenum. There they are mixed with the bile and after that with pancreatic juice in a

sequence which remains natural. It is thought that when the studies of the loss of fat, protein and nitrogen elements in the stool are complete, the group showing least loss of these elements will certainly be the Billroth I group.

The Schoemaker-Billroth I operation can be performed rather readily and usually means far less surgical intervention in those people who are not good candidates for an extensive and prolonged operative procedure. There is no need for laborious closure of the duodenal stump, followed by the dilemma of an anterior versus posterior gastrotrojejunostomy. There is no threat to the blood vessels in the transverse mesocolon. There is no struggle to suture any anastomosis below an incision in the mesocolon which, coming as it does at the very end of a tedious operation, which the Polya resection can be at times, may require more time-consuming manipulation and more prolonged anesthesia than some patients can tolerate readily. In addition, other procedures may be performed at the same time with less hesitancy. Thus, malignant invasion of the mesocolon or the transverse colon itself by a gastric carcinoma might call for resection of the mesocolon and the transverse colon with immediate end-to-end colocolostomy, and this could be done during the same operation, since the gastric portion of the operation is considerably less extensive than it would be in another method. The coincidental problem of gallstones with gastric ulcer or carcinoma can be answered immediately by performing cholecystectomy at the same time. Other procedures which may be done at the same operation include appendectomy, removal of small ovarian cysts, splenectomy, and so forth.

The convalescence from the Schoemaker-Billroth I operation appears definitely easier than that after any of the other gastric operations. Shock seems less common and blood transfusion is not required in as high a percentage of cases. There has been no more gastric retention than in any of the other methods, and postoperative complications are no different. Since we have been

so extremely enthusiastic about early ambulation many of the patients who have undergone gastric operations now very shortly after operation have the general appearance and feeling of well-being that previously were observed only after operations of the magnitude of appendectomy. Certain patients have been dismissed from the hospital within eight days, although we prefer to have them stay at least ten days, if possible, for observation for any development of late complications. The reduction in time of hospital stay has been hailed enthusiastically by the hospital authorities, who in times such as these are hard put to accommodate patients, especially with the critical nursing shortages. Postoperatively, we have been gratified to note that the anacidity is just as complete with this type of operation as it is with any of the others.

Conclusions

1. Lowered morbidity and mortality rates have extended gastric resection to a far larger proportion of cases.
2. Duodenal ulcer can still be controlled completely and permanently by adequate gastric resection.
3. Gastric resection is the treatment of choice in almost all cases of gastric ulcer.
4. Lessened risk of gastric resection extends its use to certain lesions encountered only occasionally.
5. Failure of several less radical operations led the way to wider acceptance of resection.
6. Indispensable preoperative and postoperative adjuncts have been responsible for better results.
7. Technical improvements and modifications allow use of gastric resection even in conditions of extreme inflammation.

REFERENCES

- *Dragstedt, L. R.: Section of the Vagus Nerve to the Stomach in the Treatment of Peptic Ulcer (Editorial), *Surg., Gynec. & Obst.*, **83**:547, 1946.
- *Judd, E. S., Jr.: Present Status of Surgical Treatment of Duodenal Ulcer, *J. Kansas M. Soc.*, **49**:1, 1948.
- *Judd, E. S., Jr., and Priestley, J. T.: Treatment of Gastric Ulcer, *Surg., Gynec. & Obst.*, **77**:21, 1943.

*Judd, E. S., Jr., and Moe, A. E.: Chronic Hyper-trophic Gastritis Complicated by Obstruction: Report of a Case, *Proc. Staff Meet., Mayo. Clin.*, **22**:241, 1947.

*Ferguson, I. A.: Prolapse of the Gastric Mucosa: Report of Six Cases, *Ann. Surg.*, **127**:879, 1948.

*Wollaeger, E. E., Comfort, M. W., Weir, J. F., and Osterberg, A. E.: The Total Solids, Fat and Nitrogen in the Feces: II. A Study of Persons Who Had Undergone Partial Gastrectomy With Anastomosis of the Entire Cut End of the Stomach and the Jejunum (Polya Anastomosis), *Gastroenterology*, **6**:53, 1946.

*Higginson, J. F., and Clagett, O. T.: Gastric Resection: The Schoemaker-Billroth I Operation, *Surgery*, **24**:613, 1948.

*Neibling, H. A., and Walters, Waltman: Total Gastrectomy With Esophagoduodenal Anastomosis, *Proc. Staff Meet., Mayo Clin.*, **21**:449, 1946.

*Priestley, J. T., and Kumpuris, Frank: Total Gastrectomy With Esophagoduodenal Anastomosis, *Arch. Surg.*, **56**:145, 1948.

WRITER GIVES TIPS ON PREPARING CHILD FOR SCHOOL

Mothers can help children over the often difficult hurdle of the first day in school by teaching them independence in seemingly trivial matters, says Bess Ritter of Yonkers, New York, in the current (September) issue of *Hygeia*, health magazine of the American Medical Association. A child's ability to give his full name and address and his father's name and occupation without assistance on the first day of kindergarten may seem like a small accomplishment, but it is one which may help him to get started "on the right foot," she points out. An equally small matter, but one that is important to the child, is the ability to put on his own wraps without assistance.

Children will benefit from being able to handle a handkerchief without adult help, carry out simple directions without repeated explanations from the persons who give them, and get along with children of their own age without depending on a grownup to unscramble a squabble, she indicates.

Driving children into learning letters, numbers, and short primer words is not advisable, however, although "quick" children may pick up a little such knowledge without teaching before they go to school. "What your child needs can be summed up in one word: independence—and that he gets from the atmosphere of your home as much as from anything you can teach him," she comments. "If you give him his birthright of independence, the strange surroundings will mean to him not fear but interest and opportunity."

SUNSHINE CAN PRODUCE HIVES

Hives due to allergic reaction to sunlight is a rare condition. Dr. Stephen Epstein of Marshfield, Wisconsin, however, reports two cases in great detail in the July-August issue of the *Annals of Allergy*, the official magazine of the American College of Allergists. Interestingly enough, the condition may be transferred by injecting some of the patient's blood serum into the skin of a normal individual.

The newer anti-allergy drugs help some, Dr. Epstein reports. He urged that contributing factors, notably pressure, be controlled while the patient is under treatment. The ordinary protective creams which are effective against sunburn are not effective because they do not protect against the longer ultra-violet rays.

PRESIDENTIAL ADDRESS

GEORGE E. BAKER, M.D.
CASPER, WYOMING

The Wyoming State Medical Society has come a long way since its inception in 1903. From 1944 to 1947, while I served as your Secretary, I had access to the book of minutes of the society. Perusal of them was a rewarding experience and revealed better than words can express the progress which has been made in the past forty-six years. The first meeting to be recorded took place in Cheyenne in 1905; it was held in the office of one of the host physicians and the minutes were transcribed on his office stationery. The meeting was attended by twelve or fifteen doctors, most of whom resided in the capital city.

What a different picture in 1949! Our society is rapidly approaching 200 members. Almost all of the ethical practitioners of medicine in the state belong to the Wyoming State Medical Society. With the exception of one other State Society, nevertheless, ours has the smallest membership of any in the United States. What we lack in numbers, fortunately, is more than compensated by the generally high caliber of the men within our ranks. Wyoming has but few irregular practitioners. The geographic location of our state and the type of people who inhabit it have much to do with this favorable circumstance. The "wide open spaces" do not tolerate the faker and charlatan for long and this most happy situation pertains in medicine as well as in other lines of endeavor.

The past twelve months have been eventful ones. Perhaps our biggest accomplishment has been the successful battle against the inroads of socialized medicine. All of you are familiar with the American Medical Association Educational Campaign and the encouraging manner in which medicine and the friends of medicine waged the fight against the forces which attempt to dominate us. That the doctors of Wyoming were not laggards is attested by the observation that our State Society, through voluntary contributions from individual physicians,

was among the first ten societies in per capita donations. We can rest assured that in Wyoming, as in other western states, organized medicine will continue to effectively combat the forces of evil. Political medicine will attempt for years to come to batter us into submission and adherence to its idealistic way of thinking. Its advocates, apparently, do not realize that western people are rugged individualists. Our patients are our friends and, if we continue to do our part, they will never desert us. We can be assured of their continued support and respect for the ideals close to our hearts.

It is not my intention to discuss the national scene or the state picture other than it pertains to my office as President. Dr. Ernest B. Howard, Assistant Secretary of the American Medical Association; Dr. R. H. Reeve, Delegate from Wyoming to the American Medical Association; Dr. George H. Phelps, Chairman of the Public Policy and Legislative Committee of the Society; Dr. W. Andrew Bunten, Chairman for Wyoming of the American Medical Association Educational Campaign; and others, have timely advice. It will pay us to weigh their words with care and to take their messages to our respective homes when we leave Casper. It may well be that the destiny of the Wyoming State Medical Society in the months to come will depend in no small measure on the words which you are to hear during our forty-sixth annual meeting.

I regret that I found it impossible to attend the interim meeting or the regular session of the American Medical Association during my term of office. Wyoming, fortunately, was well represented by such capable men as George P. Johnston, Earl Whedon, R. H. Reeve, George H. Phelps, W. Andrew Bunten, Arthur R. Abbey, and others. Soon after I took over as President, I realized that perhaps I could serve as effectively by attending as many meetings in the Rocky Mountain States as possible.

Last fall, in company with other members of our society, I attended a meeting in Denver, during which the groundwork was laid for the United Mine Workers Prepayment Insurance Program. This spring again with members of our organization, found me in attendance at the Governors' meeting for the western states in Denver, sponsored for discussion of regional professional schools in the Rocky Mountain areas. Then, we had our big meeting here in Casper in the spring, called for the purpose of formulating the American Medical Association Educational Campaign in Wyoming. This meeting, held at a time of year when weather conditions were far from ideal, was attended by approximately twenty-five or thirty of our members, who came from every section of the state. Finally, I attended the Midwinter Clinics in Denver and the Rocky Mountain Medical Conference in Butte and was asked, as a representative of the Wyoming State Medical Society, to preside at one of the afternoon sessions of both meetings. You are aware, of course, that physicians from Wyoming have always been well thought of in the other western states. The past year was no exception; we were cordially welcomed by our colleagues wherever we went.

This year, more than ever before, I was impressed by the increasing tempo of American medicine. Because of additional functions which state medical societies are asked to perform, the majority of them now have a working organization which meets at regular stated intervals throughout the year in order to act on current problems. It would seem imperative that the Wyoming State Medical Society fall in line with what other societies are doing, because we can no longer guide the destinies of Wyoming medicine by a single yearly meeting. At the present time, the Council is the judicial body of the society as such, and together with the President, is responsible for the operation of the society in the interim between the annual sessions. The Council could readily be enlarged so as to include ten or twelve men, selected from every section of the state, and known as the

Board of Councilors. This body could meet at certain specified times, at a central location in the state, and while doing so dispose of problems of current importance. I feel sure that, in the event the House of Delegates sees fit to create an interim organization similar to the one I have outlined, my successor in the office of President will remember me kindly in the months that lie ahead!

As is true in every organization, the Wyoming State Medical Society has those who stand by, willing at all times to be of service when called upon. These are the "work horses" who, year after year, with no thought of personal gain or financial remuneration, put their shoulders to the wheel and accomplish the tasks to which they are assigned. No President can finish his term of office without a deep sense of appreciation to these men, because they are the ones who make his task less arduous. I shall not attempt to enumerate the many who have helped me since September, 1948. I shall, instead, take this inarticulate means of voicing my gratitude to you collectively for all the fine work you have done. Thank you, one and all!

HEART INFECTION TAKES HEAVY TOLL IN DISABILITY

Despite the success doctors have achieved in curing infection of the lining of the heart by administering penicillin, patients who recover from the disease may be disabled. One out of three patients in a group of eighteen reported in the current Journal of the American Medical Association were left with a progressive heart condition, although penicillin cleared up the active infection.

Subacute bacterial endocarditis, inflammation of the membrane which lines the heart, has been until recently an almost uniformly fatal disease. In a number of cases it follows rheumatic fever, the article points out. With the advent of penicillin therapy, however, doctors have been able to cure many patients of the active heart infection. But since the membrane which lines the heart muscle covers the valves of the heart as well as its inner walls, endocarditis may leave scars which cause narrowing of one or more valves or interfere with their proper closing.

All of the group of patients reported by Drs. Sherman R. Kaplan, Ray H. Rosenman, Louis N. Katz, and William A. Brams of Michael Reese Hospital, Chicago, were followed from twenty-five to sixty-one months after their heart infection was cured by penicillin therapy. Six of the patients had progressive heart disability since the onset of subacute bacterial endocarditis. In three of these the disability led to death from heart failure. Twelve showed no progression of their heart condition, the doctors say.

Organization

National Affairs - Proceedings - Programs - Society Notices - News - Auxiliary

COLORADO State Medical Society

FIFTEENTH ANNUAL MIDWINTER POSTGRADUATE CLINICS

of the

COLORADO STATE MEDICAL SOCIETY

February 21, 22, 23, 24, 1950

PRELIMINARY PROGRAM

(A detailed pamphlet program will be mailed to each member of the Society early in February).

All Round Table Discussions, Afternoon Meetings, and the Dinner Dance will be held at the Shirley-Savoy Hotel. The Morning Clinics will be held Wednesday, February 22, at Children's Hospital; Thursday, February 23, at Colorado General Hospital; and Friday, February 24, at Denver General Hospital.

Tuesday, February 21, 1950

ALL DAY

Advance Registrations and Installation of Exhibits at Hotel.

EVENING

8:00 Annual Smoker. Colorado Room, Shirley-Savoy Hotel.

Wednesday, February 22, 1950

MORNING

Children's Hospital

President of Children's Hospital Staff, Presiding.

8:30 Registration at both Hotel and Hospital.

9:00 Pediatric Clinics. Cases presented by staff of Children's Hospital. Discussion by Douglas N. Buchanan, M.D., Chicago, Illinois (Guest).

10:00 Psychiatric Clinic. Cases presented by staff of Children's Hospital. Discussion by C. Charles Burlingame, M.D., Hartford, Connecticut (Guest).

11:00 Surgical Clinics. Cases presented by staff of Children's Hospital. Discussion by John W. Cline, M.D., San Francisco, California (Guest).

12:00 Adjourn.

NOON

12:00 All exhibits open.

12:30 Luncheon and Round Table Discussion at the Shirley-Savoy Hotel. President of Presbyterian Hospital Staff, presiding. Question and answer period conducted by Douglas N. Buchanan, M.D., C. Charles Burlingame, M.D., and John W. Cline, M.D. (Guests).

AFTERNOON

Lincoln Room of the Shirley-Savoy Hotel

Conrad H. Jenson, M.D., Ogden, President, Utah State Medical Association, Presiding.

2:00 Carcinoma of the Breast.—Stuart W. Harrington, M.D., Rochester, Minnesota (Guest).

2:45 The RH Factor in Obstetrics.—Carl P. Huber, M.D., Indianapolis, Indiana (Guest).

3:30 Intermission to study exhibits.

4:00 Good Psychiatry and Good Medicine —Inseparable.—C. Charles Burlingame, M.D., Hartford, Connecticut (Guest).

4:45 The Use of Radio-active Isotopes in the Treatment of Disease.—Bruce K. Wiseman, M.D., Columbus, Ohio (Guest).

5:30 Adjourn.

5:45 Exhibits close for the day.

EVENING

(Open Date)

Thursday, February 23, 1950

MORNING

Colorado General Hospital

Members of Colorado General Hospital Staff, Presiding

8:30 Registration Opens at both Hospital and Hotel.

ROCKY MOUNTAIN MEDICAL JOURNAL



A large benign chronic ulcer with steep side walls as seen in barium-filled shadow on the lesser curvature of the stomach.



When your patient is on a special diet, as in the management of peptic ulcer, gallbladder disease, obesity, etc., there may be insufficient fecal bulk for encouraging the normal peristaltic reflex.

METAMUCIL® is the highly refined muciloid of a seed of the psyllium group, *Plantago ovata* (50%), combined with dextrose (50%).

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

for JANUARY, 1950

45

9:00 Obstetrics and Gynecology Clinics.—Cases presented by staff of Colorado General Hospital. Discussion by Carl P. Huber, M.D., Indianapolis, Indiana (Guest).

10:00 Medical Clinics. Cases presented by staff of Colorado General Hospital. Discussion by Bruce K. Wiseman, M.D., Columbus, Ohio (Guest).

11:00 Surgical Clinics (Chest). Cases presented by staff of Colorado General Hospital. Discussion by Stuart W. Harrington, M.D., Rochester, Minnesota (Guest).

12:00 Adjourn.

NOON

12:00 All exhibits open.

12:30 Luncheon and Round Table Discussion at the Shirley-Savoy Hotel. President of Mercy Hospital staff, presiding. Question and answer period conducted by Carl P. Huber, M.D., Bruce K. Wiseman, M.D. and Stuart W. Harrington, M.D. (Guests).

AFTERNOON

Lincoln Room of the Shirley-Savoy Hotel

Dewitt Dominick, M.D., Cody, President, Wyoming State Medical Society, Presiding.

2:00 The Current Status of the Campaign to Socialize American Medicine.—John W. Cline, M.D., San Francisco, California (Guest).

2:45 The Treatment of External Cancer, with Special Reference to Microscopically Controlled Excision by the Chemosurgical Method. — Frederic E. Mohs, M.D., Madison, Wisconsin (Guest).

3:30 Intermission to study exhibits.

4:00 Contact Dermatitis. — Clinton W. Lane, M.D., St. Louis, Missouri (Guest).

4:45 Diagnosis and Treatment of the Convulsions.—Douglas N. Buchanan, M.D., Chicago, Illinois (Guest).

5:30 Adjourn.

5:45 Exhibits close for the day.

EVENING

7:30 Annual Subscription Dinner Dance. Lincoln Room, Shirley-Savoy Hotel. Sponsored by the Women's Auxiliary to the Colorado State Medical Society.

Friday, February 24, 1950

MORNING

Denver General Hospital

Members of Denver General Hospital Staff, Presiding.

8:30 Registration Opens at both Hotel and Hospital.

9:00 Pediatric Clinics. Cases presented by staff of Denver General Hospital. Discussion by Douglas N. Buchanan, M.D., Chicago, Illinois (Guest).

10:00 Cancer Clinics. Cases presented by staff of Denver General Hospital. Discussion by Frederic E. Mohs, M.D., Madison, Wisconsin (Guest).

11:00 Dermatological Clinics. Cases presented by staff of Denver General Hospital. Discussion by Clinton W. Lane, M.D., St. Louis, Missouri (Guest).

12:00 Adjourn.

NOON

12:00 All exhibits open.

12:30 Luncheon and Round Table Discussion at the Shirley-Savoy Hotel. President of Porter Sanitarium Staff, presiding. Question and answer period conducted by Douglas N. Buchanan, M.D., Frederic E. Mohs, M.D., and Clinton W. Lane, M.D. (Guests).

AFTERNOON

Lincoln Room Shirley-Savoy Hotel

J. W. Hannett, M.D., Albuquerque, President, New Mexico Medical Society, Presiding.

2:00 The Significance of Bleeding from the Rectum.—John W. Cline, M.D., San Francisco, California (Guest).

2:45 Diagnosis and Treatment of Spasticity.—Douglas N. Buchanan, M.D., Chicago, Illinois (Guest).

3:30 Intermission to study exhibits.

4:00 All exhibits close.

4:00 The Sterile Couple.—Carl P. Huber, M.D., Indianapolis, Indiana (Guest).

4:45 The Differential Diagnosis and Treatment of Pathologic Hemorrhage. — Bruce K. Wiseman, M.D., Columbus, Ohio (Guest).

5:30 Adjourn.

ROCKY MOUNTAIN MEDICAL JOURNAL



MORE AND MORE...

GYNECOLOGISTS APPROVE



Ethical prescriptions for Koromex Jelly and Koromex Cream written by alert physicians attest to the value of these pertinent and important time-tested factors...instantly spermicidal on contact...adjusted viscosity eliminates leakage...compatible with vaginal flora...adhesiveness and cohesiveness provides dependable film barrier.

The uniformly high degree of patient acceptance of Koromex Jelly or where less lubrication is required Koromex Cream...and the genuine approbation of gynecologists support the fact that the jelly and the cream are not surpassed for effective, safe, and pleasant use where pregnancy is ill advised.

ACTIVE INGREDIENTS: BORIC ACID 2.0%, OXYQUINOLIN BENZOATE 0.02% AND PHENYLMERCURIC ACETATE 0.02% IN SUITABLE JELLY OR CREAM BASES.

FOR MORE COMPREHENSIVE DATA PLEASE SEND FOR AVAILABLE PROFESSIONAL LITERATURE



KOROMEX
TRADE MARK REGISTERED

"A CHOICE OF PHYSICIANS"



HOLLAND-RANTOS COMPANY, INC., 145 HUDSON STREET, NEW YORK 13, N. Y.

MERLE L. YOUNGS • PRESIDENT

Obituaries

GEORGE H. CATTERMOLLE

Dr. George H. Cattermole, prominent physician of Boulder, Colorado, died November 10, 1949, at Boulder Community Hospital.

Doctor Cattermole was born December 7, 1868, at La Harpe, Illinois. He grew up at Fort Madison, Iowa, where he attended public schools. He received his Medical Degree from the University of Michigan at Ann Arbor in 1891. He began the practice of medicine in Lansing, Michigan, and in 1898 he moved to Boulder, Colorado, following a postgraduate course in Berlin, Germany.

Doctor Cattermole became a member of the medical faculty at the University of Colorado in Boulder with his interests centered in pediatrics, although he did some general practice.

In 1904 Dr. Cattermole was a medical officer in the Colorado National Guard and served with Adj. Gen. Sherman Bell at Cripple Creek and Victor, Colorado, during the strike at the mines. During World War I he served as a contract surgeon for the Army and later he was commissioned a Captain, M.C., A.U.S. He remained in the Medical Reserve Corps after the war and was later commissioned a Major. During World War II he was Chief Surgeon at the Japanese Concentration Camp at Manzanar, California

EDWARD B. LIDDLE

Dr. Edward B. Liddle, a leading Colorado Springs surgeon, died of a heart attack December 9, 1949, at his home, 16 West Willamette Avenue, Colorado Springs, Colorado.

Dr. Liddle was born in Handsboro, Mississippi, in 1888. He received his medical degree from Tulane Medical College in Louisiana and served overseas during World War I.

He began the practice of medicine in Colorado Springs in 1919 and was one of the West's leading urologists. He was a member of the American College of Surgeons, the International College of Surgeons, the El Paso County and Colorado State Medical Societies, and a Fellow of the American Medical Association.

ANESTHETICS FOR THE ASTHMATIC

It seems well established that people suffering from allergies, and especially asthma, are more susceptible to anesthetics than other persons. Richard E. Brennan, M.D., Chief of Anesthesiology at St. Joseph's Hospital, Reading, Pennsylvania, says in the July-August issue of the *Annals of Allergy*, the official publication of the American College of Allergists, that the success of anesthesia in the allergic patient depends upon proper planning or proper selection of the drugs to be used. The critical time usually comes after the operation is over. Strict care must be given at this time, he stresses.

Very few cases of allergy to the commonly used inhalation anesthetics have ever been reported. But with the newer drugs and the injectable anesthetics, the story is different. With this much depends upon the skill of the anesthesiologist. He should always be given a chance to study the patient before the operation so that he can intelligently study the proper drugs. Not infrequently, Dr. Brennan points out, it may be necessary to select a second choice of anesthetic agent or procedure, rather than the first (original) choice, because of this complication in the situation.

REPORT OF COLORADO DELEGATES TO THE CLINICAL SESSION OF THE A.M.A.

The Clinical Session of the American Medical Association was held in Washington, D. C., December 6 to 9, 1949. While the record of attendance has not been obtained, it may be estimated that about 4,000 were registered. This large registration is of particular interest to Colorado. It indicates the growing popularity of the Clinical Session and suggests that we may expect a large registration when the session is held in Denver in 1950.

The scientific and commercial exhibits were of the usual high order and the scientific sessions were well attended.

It is not feasible to abstract all of the actions taken by the House of Delegates. The full proceedings will be published in the next few issues of the *Journal A.M.A.* and it is urged that all physicians read them.

The most important action was the unanimous approval of levying annual dues of \$25.00 on all active members. It was decided that the collection of dues should be the duty of the component or county society, the dues to be remitted through the constituent or state association to the American Medical Association. Adequate provision was made to exempt from payment of dues retired members and those on whom the assessment might work a hardship. The decision as to members exempted from payment rests with the state and county societies.

There was much favorable comment on the accomplishments of the Colorado Board of Supervisors. The House passed a motion by unanimous vote requesting that all constituent associations or component societies establish a like board to investigate complaints.

The House voted determined opposition to S. 1453 and H.R. 5940 which would provide Federal funds for grants to schools of medicine, osteopathy, dentistry, nursing and sanitary engineering. It was believed that this bill would result in Federal control of schools. The House favored "help where needed without political control."

S. 1411, a bill to provide "health examinations and treatment for ALL school children between ages 5 and 17 years" was opposed on the basis that it provides services to children regardless of the economic status of parents. This would be socialized medicine for children.

The Hess Report on Hospitals and Medical Practice was returned to committee for reconsideration and report at the annual session in 1950.

The Colorado resolution on compensation for members of the Board of Trustees and general officers was referred to the Secretary and General Manager for study.

Dr. George Craig, national commander of the American Legion, addressed the House and stated that his organization was opposed to compulsory health bills and to socialized medicine. The name of Hygeia was changed to Today's Health. The resignation of Dr. Morris Fishbein as editor of the *Journal A.M.A.* was announced and Dr. Austin Smith was appointed to the editorship. Dr. Andy Hall of Mt. Vernon, Illinois, was elected General Practitioner of the Year.

GEORGE A. UNFUG,
WILLIAM H. HALLEY.

more physicians are satisfied

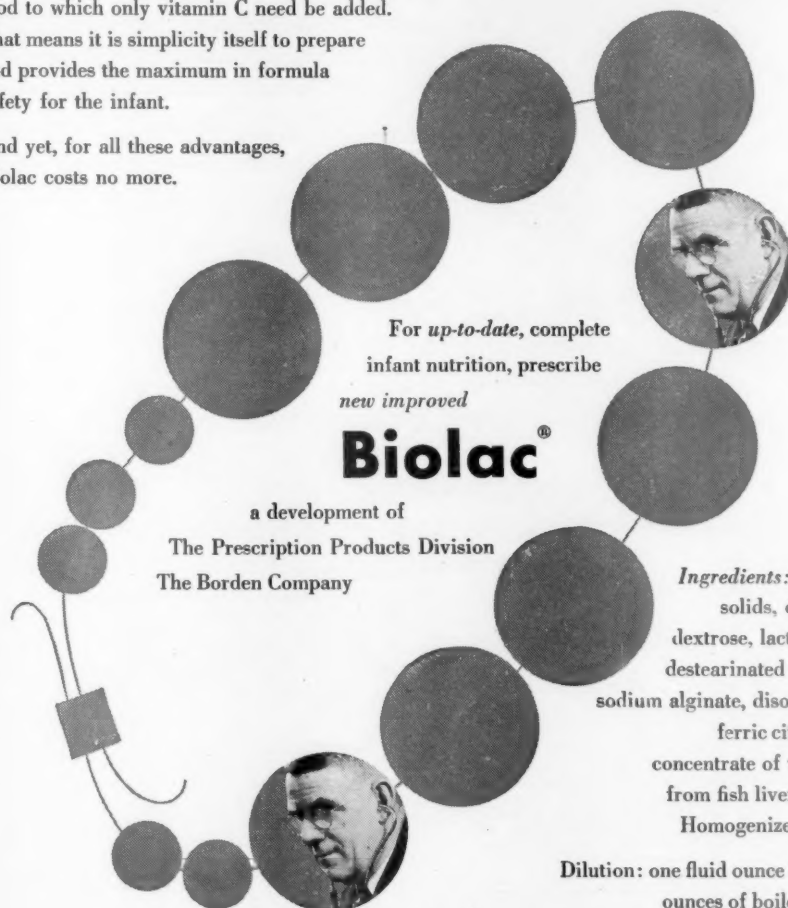
The development of the new improved Biolac supplies a long-sought need in infant nutrition. To accomplish this, Borden scientists surveyed our present nutritional knowledge. They then tested more than 500 formulations. Having decided on the formula that would best supply the normal infant's nutritional requirements in their most assimilable form, a modern plant was constructed in 1949 so that the new formula could also benefit from the most up-to-date techniques and control in processing equipment. A Biolac formula that is both new and improved is thus made available.

Biolac is intended for prescription by every physician with infants among his patients.

It satisfies the physician's demand for a complete food to which only vitamin C need be added.

That means it is simplicity itself to prepare and provides the maximum in formula safety for the infant.

And yet, for all these advantages, Biolac costs no more.



For up-to-date, complete
infant nutrition, prescribe
new improved

Biolac[®]

a development of
The Prescription Products Division
The Borden Company

Ingredients: nonfat dry milk solids, dextrins-maltose-dextrose, lactose, coconut oil, destearinated beef fat, lecithin, sodium alginate, disodium phosphate, ferric citrate, vitamin B₁, concentrate of vitamin A and D from fish liver oils, and water. Homogenized and sterilized.

Dilution: one fluid ounce to one and a half ounces of boiled water for each pound of body weight.

Biolac is available in 13 fluid ounce tins.



The Borden Company, Prescription Products Division

350 Madison Avenue, New York 17

COLORADO

State Health Department

Private physicians share the responsibility for health education of the public with the health department, voluntary health agencies, and educational institutions. In addition to the education of individual patients, physicians are constantly called upon to address clubs and organizations on all manner of health topics. Very often such requests are made with no plan in mind other than to fill a program schedule with an interesting hour that can be disregarded as soon as it is over.

Physicians are too busy to devote professional time to filling such requests. At the same time, an opportunity to increase the awakening interest of people in their health and medical problems is not to be lightly dismissed. Most physicians feel obligated to take advantage of such opportunities.

Faced with the problem of turning a "talk on health" into a sound educational experience, based on the interests and needs of the group in matters on which they can take action, physicians may wish to turn to the resources of the Health Education Section of the State Department of Public Health. The section has many educational tools that can be utilized in such situations.

A recent check made by the section disclosed that psychiatrists and physicians especially interested in mental hygiene make the most frequent and consistent use of its health education materials. Mental health, however, is only one of the subjects for which the section has available films, filmstrips, slides, recordings, books, booklets, pamphlets and leaflets. All of these tools are at the disposal of the state's physicians.

All health education materials carried have been reviewed by the Medical Directors for scientific accuracy and by the Health Education Section for educational value. Materials are classified according to age groups or interest levels where they can be most effectively used. This specificity in selection and use of materials increases their value in supplementing and reinforcing the physician's presentation of a health topic.

A physician who has been asked to address a PTA group on child health, knowing the communicable disease rate among children is high in that area, might choose to discuss the value of early immunization. From the Health Education Section he can secure a film on immunization to use as an introduction to his topic or to stimulate discussion. Leaflets and pamphlets on the subject could be distributed at the end of the meeting. The interest and understanding aroused by the combined use of visual, oral, and written communication can then be channeled into a program of action to increase substantially the rate of immunization. Such results would justify a physician taking time from a busy schedule to deliver a "talk on health."

All of the health education materials carried by the State Department of Public Health are listed in the bibliography, "Public Health Education Material." Copies may be obtained by writing to the Health Education Section, 616 Colorado Building, Denver.

HOSPITALIZATION OF COMMUNICABLE DISEASES

At a recent meeting of the Local Health Officers Association of Colorado, held in Colorado Springs, the following resolution was unanimously adopted, and officers of the Association asked that it be given the widest possible publicity:

Resolution

Concerning Isolation and Care of Communicable Disease Patients in General Hospitals

WHEREAS, The care of communicable diseases in communicable disease hospitals, is, in most instances, a very expensive procedure, and beds by no means need to be in hospitals especially designed for communicable disease, but may easily and profitably be in general hospitals, if the general hospital is equipped and made convenient for the practice of aseptic medical technic for those cases requiring hospitalization, and

WHEREAS, Communicable diseases may be cared for in such general hospitals with little risk to everybody concerned; indeed there will usually be a considerable period of the year when the beds can be used in whole or in part for other than communicable disease patients, especially children, and

WHEREAS, The use of facilities for tuberculosis patients in general hospitals has also been found practicable in some communities, and

WHEREAS, The facilities of general hospitals are often needed in the care of patients with communicable diseases where other conditions are present; therefore, be it

RESOLVED, That the Local Health Officers Association of Colorado go on record as favoring the hospitalization of communicable diseases in general hospitals under the standards and conditions as set up by the local and/or state health departments.

USE RADIOACTIVE COMPOUND TO CONTROL RARE BLOOD DISEASE

Control of the rare and previously fatal blood disease, polycythemia vera, a condition in which the body manufactures red blood cells too rapidly, is reported by Dr. John H. Lawrence of the University of California, Berkeley, in the current (September 3) Journal of the American Medical Association.

In the treatment developed by Dr. Lawrence and his colleagues, a compound (sodium radiophosphate) containing radioactive phosphorus is administered. This chemical collects "to a pronounced degree" in bone, bone marrow, and some rapidly growing tissue and apparently inhibits red cell production, according to the article.

Persons treated for polycythemia vera with the radioactive compound now have as favorable an outlook as do those treated for sugar diabetes with insulin or those treated for pernicious anemia with liver, Dr. Lawrence says. He bases his conclusion on a ten-year study of the treatment of 172 patients.

Average age at the onset of the blood disease in the series of patients was 50.7 years, and the average age of those patients who died was 67 years. This is nearly a normal life expectancy for persons in this age group, Dr. Lawrence points out.



SNOOZER PETE *is a Breakfast Cheat*

Skip the morning repast? Not Pete. If he snoozes until 8:02, he can still make the 8:24 by a flying leap—with a few minutes at the other end for gulped coffee and a cigarette. Scanty breakfast? He'll make it up at lunch—if he has time.

Pete doesn't think he's a meal-cheater. Neither does the food faddist, the worrier, the reducing "expert" nor any of their kin likewise committed to dietary sin. Thus do they become prey to all the associated evils of subclinical vitamin deficiency.

When you examine the habit patterns of these

patients, it's obvious that overnight dietary reform won't come easy. So isn't it wise to make use of the aid provided by vitamin supplementation?

Wise also to specify ABBOTT. You know there's a dependable ABBOTT vitamin product to serve nearly every vitamin need—for supplementary or therapeutic levels of dosage, for oral or parenteral administration. Your pharmacist can always supply fresh and potent ABBOTT vitamin products in a wide variety of attractive forms and package sizes. ABBOTT LABORATORIES, NORTH CHICAGO, ILL.

Specify

ABBOTT VITAMIN PRODUCTS

NEW MEXICO Medical Society

NEW MEXICO CLINICAL SOCIETY

Dr. George Saslow, Department of Neuropsychiatry, Washington University School of Medicine, lectured on "Emotional Problems of People With Tuberculosis and Other Chronic Illness" at the meeting of the New Mexico Clinical Society, held in Santa Fe at the Museum of Anthropology, Old Pecos Road, on Monday, December 19.

Obituary

LOREN F. ELLIOTT

Loren F. Elliott, M.D., physician and surgeon in Albuquerque for the past twenty-four years, died December 12, following an illness of several months. He was 56 years old.

Dr. Elliott was a graduate of St. Louis University School of Medicine. He was a World War I veteran, a Mason, a member of the New Mexico Medical Society, and a past president of the Bernalillo County Medical Society.

UTAH State Medical Association

Obituary

WARREN SHEPHERD

Dr. Warren Shepherd, well known physician of Salt Lake City and southern Utah, died November 29, 1949, at the home of his son, Dr. W. S. Shepherd of Camas, Washington.

Dr. Shepherd was born June 5, 1880, in Beaver, Utah. He was a graduate of Brigham Young University, Provo. He filled a mission in Germany in 1900 for the Church of Jesus Christ of Latter-day Saints. He graduated from the Jefferson College School of Medicine in 1910.

After receiving his medical degree, Dr. Shepherd returned to Beaver, Utah, where he practiced medicine until 1919, when he moved to Salt Lake City.

Dr. Shepherd served as mayor of Beaver for two terms and was a member of the L.S.D. stake presidency. He was a member of the Salt Lake County, Utah State, and American Medical Associations.

Dr. Shepherd is survived by his widow and three sons: Dr. Warren S. Shepherd, Camas, Washington; Quin T. Shepherd and Heber J. Shepherd of Delta; two daughters, Mrs. Fayette S. Gerrard, Holladay, Utah, and Mrs. Mary S. Caffee of New York City; also six grandchildren.

NATIONAL CONFERENCE ON MEDICAL SERVICE, 1950 MEETING

The National Conference on Medical Service will hold its 1950 meeting at the Palmer House in Chicago Sunday, February 5.

The speakers will be: Mr. Joseph Lawrence, Washington, D. C.; Dr. E. E. Irons, Chicago; Con-

gressman James Dolliver, Fort Dodge, Iowa; Mr. George E. Brand, attorney, Detroit, Michigan; Mr. Allan Kline, Chicago; Dr. Warren F. Draper, Washington, D. C.; Mr. Ray D. Murphy, New York.

ANNUAL CLINICAL CONFERENCE, A HIGH- LIGHT OF THE CENTENNIAL YEAR OF THE CHICAGO MEDICAL SOCIETY

Attendance at the 1950 Clinical Conference of the Chicago Medical Society should be a must on your schedule. Set aside four days—February 28, March 1, 2, and 3, 1950, for valuable postgraduate observations in the great medical center of Chicago. There will be clinical sessions and scientific lectures by the nation's foremost medical authorities and educators. There will be selected scientific and technical exhibits, displays that will dramatize the medical developments "up-to-date." There will be color television of actual surgical procedures, and also black and white telecasts. Observers will see close-up surgical techniques and medical procedures in full color detail. There will be entertainment. The conference dinner will highlight speakers and entertainers. Mark your calendar now for February 28, March 1, 2, and 3, and make your reservation direct to the Palmer House, which will be the headquarters for this great 1950 meeting.

SKIN TEST FOR TOBACCO ALLERGY

Skin testing to determine what substance a patient is allergic to, is comparable to the taking of fingerprints at the scene of the crime. It is only a short cut to one bit of evidence which, if unearthed, is most helpful, but often as not fails to identify the offenders.

As a result there is a great divergence in the results obtained by the different workers in the field of allergy in the studies of skin tests with tobacco and their significance.

Dr. A. Oliveira Lima and Dr. Glynne Rocha of Rio de Janeiro, Brazil, writing in the current issue of the *Annals of Allergy*, official publication of the American College of Allergists, report their results in testing 200 allergic and non-allergic children in Brazil. Their results indicate that properly prepared extracts of the leaves of tobacco are not of themselves irritants and, therefore, positive skin tests made with these should have significance. Positive skin reactions were twice as prevalent among children whose mothers used tobacco during gestation and nursing as in those whose mothers were non-smokers, and most of these were proven to have immunological significance. The results, therefore, suggest that the allergy is developed by the child while in the mother's womb or by way of the mother's milk later. Since it has been difficult to explain tobacco allergy in non-smokers, these results should be of great help in such cases.

The incipient lesion of pulmonary tuberculosis of limited extent is practically always of unstable character and that in a large proportion of the cases it progresses to advanced and destructive disease. There is reason to believe that the majority of cases of manifest clinical tuberculosis have their origin in these seemingly inconspicuous, small lesions.—David Reisner, M.D., *Am. Rev. Tuberc.*, March, 1948.

**If she is one
of your patients**



..Your help now may spell the difference between unprovided-for old age and economic security.

Women in business who are nervous, emotionally unstable and generally distressed by symptoms of the climacteric almost inevitably experience a reduction in efficiency as well as earning power.

"Premarin" offers a solution. Many thousand physicians prescribe this naturally-occurring, oral estrogen because...

1. Prompt symptomatic improvement usually follows therapy.
2. Untoward side-effects are seldom noted.
3. The sense of well-being so frequently reported tends to quickly restore the patient's confidence and normal efficiency.
4. This "Plus" (the sense of well-being enjoyed by the patient) is conducive to a highly satisfactory patient-doctor relationship.
5. Four potencies provide flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg. and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).



While sodium estrone sulfate is the principal estrogen in "Premarin," other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water-soluble conjugates.

"PREMARIN"



ESTROGENIC SUBSTANCES (WATER-SOLUBLE)
also known as **CONJUGATED ESTROGENS** (equine)

Ayerst, McKenna & Harrison Limited 22 East 40th Street, New York 16, New York

for JANUARY, 1950

53

Tuberculosis Abstracts

Issued Monthly by the National Tuberculosis Association

Vol. XXIII

JANUARY, 1950

No. 1

Cough is a common symptom, yet often it is not evaluated properly nor treated effectively. The physician is confronted with the questions: What is a cough? What are the causes of coughing? What should be done about it?

COUGH

Cough may be distressing and purposeless but more often it is a necessary and useful act. Cough can be produced voluntarily but more commonly it is a reflex response frequently reinforced by volition.

The act of coughing can be divided into three phases, namely: inspiratory, compressive, and expiratory. During the inspiratory phase there is a deep, often quick inspiration, followed by closure of the glottis. This results in an increase in intrapulmonary pressure, the compressive phase, immediately preceding expiration. During the expiratory phase the air is forced out with the production of characteristic cough sounds.

The function of cough is the removal of mucus, inflammatory exudate and other material from the air passages, or foreign bodies and other materials which may have been aspirated into the tracheobronchial tree.

Cough is a complex act which depends for its effectiveness on a number of factors. Important among these are bronchial movements which are dependent upon the ability of bronchi to elongate and increase their diameter during inspiration and to shorten and decrease their diameter during expiration. During the expiratory phase there is also forcible compression of the lung through action of the diaphragm and the chest wall.

The narrowing of the bronchus is greatly accentuated in asthmatics and in cases of pulmonary emphysema. It is observed least in persons with pulmonary fibrosis or anthracosis. This compressive action forces secretions upward into the larger bronchi.

Ciliary function is important in the elimination of secretions from all portions of the airway except the terminal bronchioles. During acute infections with excessive or tenacious secretions, activity of cilia may be greatly impaired.

The establishment of a condition of tolerance may lessen or obliterate temporarily the reflex cough. This is commonly observed in patients with bronchiectasis who are able to go without coughing for hours. When cough is initiated voluntarily they may evacuate several ounces of pus before again relapsing into a state of tolerance.

What are the causes of cough? In the common respiratory diseases such as pulmonary tuberculosis, pulmonary abscess or other pulmonary diseases, cough is a frequent symptom, and the cause can be demonstrated by roentgen study and physical examination. Excessive smoking and chronic alcoholism produce local congestive changes in the pharynx, larynx and tracheobronchial tree which give rise to cough. Exposure to dust and fumes exerts an unfavorable influence on the respiratory tract. An extrapulmonary cause of cough may be irritation of the external auditory canal, or nasal and pharyngeal obstruction. Cough may be associated with the taking of food or fluid, in paralysis of the larynx, or in laryngeal disease. Severe productive cough occurring when one changes position suggests either pulmonary abscess, bronchiectasis or empyema with bronchopleural fistula.

In investigating this symptom a careful history of the onset and character of the cough, the presence and appearance of sputum, the time of occurrence and associated symptoms are important.

A study of the chest and the cardiovascular system should be made. The more common causes of cough should be excluded first. One should then proceed with an examination of the ears, nose, mouth, throat laryngopharynx, larynx and neck, which can be done by any physician who has a reasonable knowledge of the upper air and food passages. The inveterate smoker should be encouraged to discontinue smoking and the worker in dust or fumes should minimize exposure in the absence of any definite localizing evidence of disease. Unexplained radiographic shadows or localized physical signs indicate bronchoscopy if the patient is an adult male. Cough with or without slight sputum is a common early symptom of bronchogenic carcinoma.

Bronchography is indicated if there is any suspicion of increased bronchopulmonary markings suggesting bronchiectasis. With a history of allergy, appropriate tests should be made.

The patient may be contented with the effects of a cough sedative or intralaryngeal instillations. The physician, however, should be interested in determining the cause of the cough.

Cough is necessary to rid the tracheobronchial tree of excessive secretions as in pulmonary abscess or bronchiectasis and in these narcotics should be used sparingly. In carcinoma, cough commonly is purposeless and is an early manifestation of bronchial irritation. In the postoperative case the cough "reflex" should not be suppressed. There must be adequate drainage of the tracheobronchial tree to prevent bronchial obstruction with secretions and postoperative pulmonary atelectasis.

If cough is purposeless, cough sedatives may be indicated. When cough is inadequate so-called stimulating expectorants are recommended. Inhalations of carbon dioxide and oxygen increase the quantity of sputum, and have been highly recommended.

The physician must regard cough as a symptom and although relief should be afforded the patient while the cause of cough is investigated, merely suppressing cough with a narcotic often will prove harmful.

Cough, Louis H. Clerf, M.D., The Mississippi Doctor, July, 1949.

The Book Corner

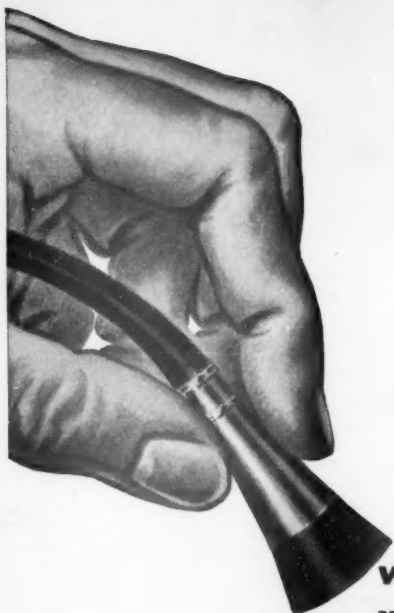
Book Reviews

Current Therapy, 1949, Latest Approved Methods of Treatment for the Practicing Physician: Howard F. Conn., M.D., Editor, Consulting Editors, M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, William J. Kerr, Perrin, H. Long, H. Houston Merritt, Paul A. O'Leary, Walter L. Palmer, Hobart A. Reimann, Cyrus C. Sturgis, Robert H. Williams. 637 pages. W. B. Saunders Company, Philadelphia and London.

Current Therapy is a new book, published by Saunders & Co.

In recent years much progress has been made in medicine, especially in the field of therapy. It is most important for the practitioner of any field of medicine to keep up with this constant progress.

For this purpose this new book is a very valuable addition to our book shelves. In a very concise manner the methods of treatment of all diseases are presented. Over 200 outstanding physicians of various medical centers present their individual methods of treatment, as they are used daily on a large number of patients. For some illnesses several authors have been asked to give their ways and thus the reader



worth consideration . . .

YOUR FUTURE WITH THE ARMY OR THE AIR FORCE MEDICAL CORPS

Advanced medical and surgical practice with latest and most modern equipment and techniques.

Applied or pure research in many areas of medical science. Facilities of military and civilian medical centers—use of civilian consultant program.

Charted advancement in your selected career field with less administrative burden, more opportunity to practice.

Important personal rewards through extra professional pay on top of base pay, food and quarters allowances, other extras. Free retirement at comparatively early age.

Increased professional standing through contribution to a progressive, highly-specialized field of modern medicine. The military doctor-and-officer enjoys a two-fold responsibility and authority . . . contributes doubly to national welfare!

**U. S. ARMY
MEDICAL DEPARTMENT
U. S. AIR FORCE
MEDICAL SERVICE**

Your skills are vitally important to the national security effort. Write the Surgeon General, U. S. Army, or the Surgeon General, U. S. Air Force, Washington 25, D. C., for full details about Reserve Commissions and active duty!

can follow the routine which appeals more to his own judgment.

Conclusion: Current Therapy is a new modern book which will be much help as a quick reference as to the latest methods of therapy.

LOUISE B. FRANKENBURGER.

Psychodynamics and the Allergic Patient: By Harold A. Abramson, M.D., F.A.C.A., Associate Physician for Allergy, The Mount Sinai Hospital, New York, N. Y.; Consulting Physician for Allergy, Sea View Hospital, Stanten Island, N. Y.; Assistant Professor of Physiology, Columbia University, New York, N. Y. Panel Discussion, Rudolph L. Baer, M.D.; Ethan Allan Brown, M.D.; O. Spurgeon English, M.D.; Hal M. Davidson, M.D.; Frank Fremont-Smith, M.D.; J. A. P. Miller, M.D.; M. Murray Peshkin, M.D.; Homer E. Prince, M.D.; Sandor Rado, M.D.; Edward Weiss, M.D. An official publication of the American College of Allergists. 81 pages. The Bruce Publishing Company, Saint Paul and Minneapolis. 1948.

This small book is a compilation of two papers by the author and a panel discussion of those papers by allergists and psychiatrists at a symposium conducted by the American College of Allergists. The first paper presents an historical review of the subject prior to 1900. "Rose Fever" was interpreted to apply to nasal allergies occurring at the time roses were blooming—not caused by roses.

Cases are presented by the author and the participants in the discussion to show that forces of psychogenic origin may aggravate or precipitate symptoms in the allergic patient. While there seemed to be no question regarding the specificity of an adequate "force," no satisfactory explanation of how the force operates is offered; a serious deficiency considering the title. The author stressed that such concepts did not mean to study immune mechanisms less but to devote more attention to the psychosomatic aspect of the allergic patient. In general, the panel discussion sustained the author's views but an encouraging note of disagreement was presented by a few outstanding men.

FRANK T. JOYCE.

Your Child or Mine—The Story of the Cerebral-Palsied Child: By Mary Louise Hart Burton in collaboration with Sage Holter Jennings. Coward-McCann, Inc., New York. Price, \$1.25.

"Your Child and Mine" is a story of cerebral palsy children. The author, Mary Louise Hart Burton, in collaboration with Sage Holter Jennings, describes in very readable and understandable language, through the medium of case histories, the different types of cerebral palsy and what can be done for them. They show the case of the athetoid, born 38 years ago who was not accepted in his community and for whom his family could secure no medical guidance until he was 24 years of age (1934). Since that time, with proper diagnosis and treatment, he has become educated and is now employed and able to drive his own car. Had he been born in 1949, treatment would have been available and he would have been spared untold tragic experiences by non-understanding persons.

The authors tell the story of the spastic, the tremor, rigidity, ataxic cases, and also bring out the emotional problems, both in the patient and family members, which are so much a part of cerebral palsy.

This small book is excellent material for parents for it is so rich in information on causes, treatment and problems of cerebral palsy. Not

only parents of cerebral palsy should read this story—but all parents, for it gives one an understanding of cerebral palsied and their problems and cannot but help to make everyone more willing to accept the cerebral palsy as an individual rather than as a handicapped person.

This book is not written for the doctors or professional technicians but for the lay public and is worthy of everyone's attention.

MISS LAURA M. NEILSEN,
Colorado Society for Crippled
Children and Adults.

Care of the Surgical Patient; Including Pathologic Physiology and Principles of Diagnosis and Treatment: By Jacob Fine, M.D., Surgeon-in-Chief, Beth Israel Hospital; Professor of Surgery at Beth Israel Hospital, Harvard Medical School. W. B. Saunders Company, Philadelphia and London, 1949.

This book holds a unique place among works on surgery. It is not a textbook of surgery nor is it strictly a book on pre- and postoperative care. It essays to do more than this, including in its contents such diversified topics as symptoms and signs in diagnosis, surgical physiology, management of diseases in the various surgical fields, as well as a section in general pre- and postoperative care. The subject matter is presented in an informal style and presents the considered opinion of the staff of a teaching hospital. No authorities are quoted and no controversial opinions are expressed. There is no bibliography. Its variety of factual data is intended for the busy physician on the run.

One weakness of the book is that with such a wide range of material some of the subjects are handled in a superficial manner. For example, the opening chapter is entitled, "Useful Hints in Surgical Diagnosis." While many symptoms and signs are included, the subject cannot be thoroughly dealt with in fourteen pages. The chapter on water balance and nutrition also gives the impression of being overly condensed.

On the other hand, a tremendous amount of worthwhile material has been gotten into this volume of 543 pages. What has impressed this reviewer mostly is the concise and yet complete way that the matters of diagnosis and details of treatment are presented. In treating the subject of carcinoma of the colon, for example, the author goes into the immediate postoperative management of the colostomy and then gives detailed instructions to the patient in the care of the colostomy including diet, enema, etc., with a forewarning of the difficulties that may be encountered. Worthy of mention is a chapter on pediatric surgery in which the common anomalies are described and the management discussed. Diagnostic methods and laboratory technic are given a prominent place in this book, and in the closing chapter pre-operative preparation and general postoperative care with the management of complications are set forth.

If one word could be used to characterize this book, it would be the word practical. Here is a handy reference book that has the answers to all sorts of problems in a few words. And the suggestions for treatment, dosage, etc., are complete.

The surgical specialist may look at his section as over-simplified in this book, yet the general practitioner and internist will welcome the book as an excellent way to keep up with the progress of their surgical case.

JACOB FINE.



A Disability Life Income Program for Eligible Physicians & Surgeons of your State

**Lifetime Protection
for both
Sickness & Accidents**

A SILENT PARTNER . . . Continental's Companion Policies

Pays \$ 400	Monthly Benefits first 2 years (\$200 1st mo.) and
\$ 300	Monthly Benefits thereafter for Life.
Pays \$ 600	Additional Monthly Benefits
	First 3 Months for Hospital Disability.
Pays \$ 7,500	Accidental Death Benefits, \$12,500 Double Indemnity.
Pays \$10,000	Loss of Hands Feet or Eyes, \$15,000 Double Indemnity (or)
\$ 3,000	Cash, & \$400 monthly first 2 years, \$300 monthly thereafter.
	Adjusted benefits for disabilities occurring after age 60.

SPECIAL FEATURES

No Cancellation Clause,—Standard Provision 16
No Terminating Age,—Standard Provision 20
No Increase in Premium,—Once Policy is Issued
Grace Period 15 Days

Non Pro-Rating,—Standard Provision 17
Non-Assessable,—No Contingent Liability
Non-Aggregate,—Previous Claims Paid
do not limit Company's Liability

Unusually Complete Protection

- ★ Pays Monthly Benefits from 1st Day to Life.
- ★ Pays Benefits for both Sickness and Accident.
- ★ Pays Lifetime Benefits for Time or Specific Losses.
- ★ Pays Regular Benefits for Commercial Air Travel.
- ★ Pays Benefits for Non-Disabling Injuries.
- ★ Pays Benefits for Non-Confining Sickness.
- ★ Pays Benefits for Septic Infections.
- ★ Pays Whether or not Disability is Immediate.
- ★ Waives Premiums for Total Permanent Disability.
- ★ Renewal is guaranteed to individual active members, except for non-payment of premium, so long as the plan continues in effect for the members of your designated organization.

CONTINENTAL CASUALTY COMPANY

PROFESSIONAL DEPARTMENT, *Intermediate Division*

30 EAST ADAMS STREET—SUITE 1100—CHICAGO 3, ILLINOIS

Also Attractive
Health With
Lifetime Accident
Policy I.P.-1327
For Ages 59 to 75

Name.....
Address.....
Age.....

NOTICE:—Only Companion Policies GP-1309 and IP-1308 pay the above benefits.
IMPORTANT—Permit no agent to substitute—**IMPORTANT**

Clinical Auscultation of the Heart: By Samuel A. Levine, M.D., Clinical Professor of Medicine, Harvard Medical School; Physician, Peter Bent Brigham Hospital; and W. Proctor Harvey, M.D., Research Fellow in Medicine, Harvard Medical School; Assistant in Medicine, Peter Bent Brigham Hospital. Illustrated. Philadelphia and London, W. B. Saunders Company, 1949. Price, \$6.50.

As might be expected from the title and the previous publications of the senior author, this little book is a carefully detailed account of the authors' interpretation of sounds heard in clinical auscultation of the heart. Its 287 pages of text are divided into four parts: fifty pages on production and interpretation of individual heart sounds, eighty-eight pages on cardiac irregularities, 110 pages on cardiac murmurs and forty pages on miscellaneous auscultatory findings. The thirty-five page index is highly detailed and well planned, making the material easily available for reference.

The author's style is simple, concise and to the point. This, together with clear print on good paper, makes for easy reading despite the moderate complexity of some of the material. The text is profusely illustrated with 286 figures, each consisting of one or more simultaneously recorded phonocardiograms and electrocardiograms. These make the book a virtual atlas of phonocardiography but a great many of them could well be omitted without detracting from the clarity of presentation.

Although strictly not within the avowed scope of the book, short sections on the treatment of various cardiac arrhythmias are included and would seem to add rather than detract from the value of the presentation.

A careful reading will provide the reader with an excellent review of cardiac auscultation and will suggest many valuable clues for the differentiation of cardiac disorders. It should prove a valuable source for anyone who uses a stethoscope.

DANIEL H. BUCHANAN, JR.

The Practice of Refraction: By Sir Stewart Duke-Elder, K.C.V.O., M.A., D.Sc. (St. And.), Ph.D. (Lond.), M.D., F.R.C.S., Hon. D.Sc. (North Western); Surgeon-Oculist to H.M. the King; Knight of Grace of the Order of St. John; Consulting Ophthalmic Surgeon to the Army and the Royal Air Force; Director of Research, Institute of Ophthalmology, University of London; Consulting Ophthalmic Surgeon, Moorfields Westminster and Central Eye Hospital; Ophthalmic Surgeon, St. George's Hospital. Fifth Edition with 216 Illustrations. The C. V. Mosby Company, St. Louis, 1949. Price, \$6.25.

This popular and well-known book is in its fifth edition, which in itself is ample proof of the enthusiasm with which it has been received. The character of the book has not been changed, but the material has been brought up to date.

The author emphasizes repeatedly various symptoms induced by ocular difficulties, especially small refractive errors. Headaches of almost any character can originate in the eyes. Several pages are devoted to aniseikonia, a relatively newly discovered cause of eye strain.

The subject of treatment is quite adequately covered, more so in this book than in any book of this nature known to the reviewer. For instance, the home and office treatment of convergence insufficiency, a diagnosis of frequent occurrence, is simply and exhaustively explained. There are many fine pointers throughout the book for examining and treating refractive errors, and muscle imbalances. Almost every line

contains important information, so it is best to read the book carefully.

It covers all phases of refraction, from physiologic optics to the manufacture of glasses, including contact lenses.

Many doctors will find advantage in reading this compact little book. No student of ophthalmology should be without it, especially since it was written by the generally conceded foremost ophthalmologist now living.

JOHN A. EGAN.

Medicine Throughout Antiquity: By Benjamin Lee Gordon, M.D., Member American Association of the History of Medicine and American Academy of Ophthalmology and Otolaryngology; Certified by American Board of Ophthalmology; Attending Ophthalmologist to Shore Memorial Hospital, Somers Point, New Jersey, and to Atlantic County Hospital for Tuberculous Diseases and Atlantic County Hospital for Mental Diseases, Northfield, N. J.; Authorized Medical Examiner for Civil Aeronautics Administration, Department of Commerce, Washington, D. C.; Author of "The Romance of Medicine." Foreword by Dr. Max Neuburger. 157 Illustrations. Philadelphia, F. A. Davis Company, Publishers, 1949. \$6.00.

This is a must book for all who are interested in the past, present or future of medicine.

Dr. Gordon, an experienced researcher in medicine, has bridged the gap from the prehistoric and photohistoric period down to the fifth century A.D. where many medical histories begin.

"The purpose of this book," says the author, "is to present an historical resume of medicine as it was conceived, developed and practiced by the people of antiquity."

Again he has endeavored "to collect and systemize facts."

This he has done in a most interesting way. From his "facts" we learn the ancient origin of many of our recent medicines, including some of our miracle drugs.

We learn of prehistoric therapeutic methods which we have perfected and are now using daily.

We learn of other therapeutic measures which will be perfected in the future.

It is a treatise not to be digested at one meal, rather an appetizer to stimulate therapeutic thoughts.

"That which hath been, is that which shall be,

And that which had been done is that which shall be done,

And there is nothing new under the sun."

It is a book of 818 pages, with 157 clear art illustrations, clean print, good paper and easy reading.

ROBERT S. IRWIN.

Diseases of the Aorta: Diagnosis and Treatment: By Nathaniel E. Reich, M.D., F.A.C.P., Associate in Medicine, Long Island College of Medicine; Attending Cardiologist, Harbor Hospital, Brooklyn, N. Y.; Associate Attending Physician, Kings County Hospital, Brooklyn, N. Y.; Senior Cardiologist, Veterans Administration, Brooklyn, N. Y. The Macmillan Company, New York, 1949. Price, \$7.50.

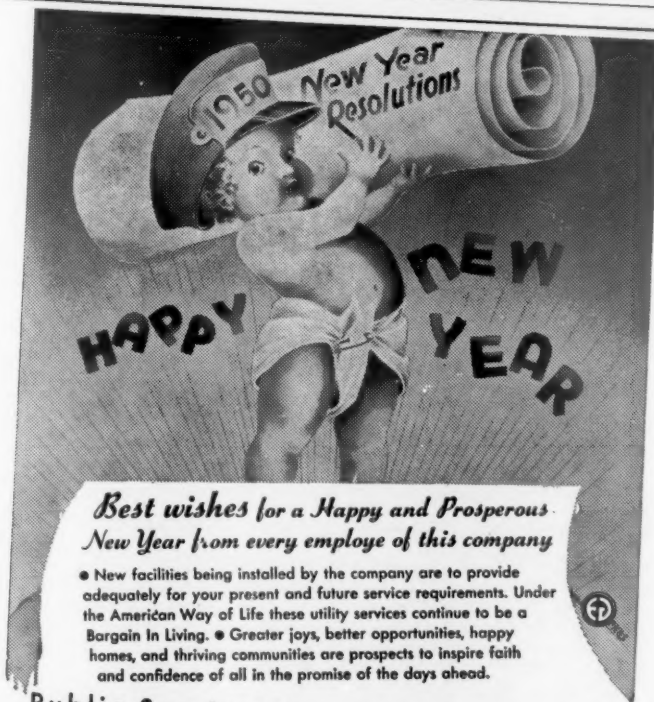
In this small book, the author has endeavored to give the reader a comprehensive treatise on the history, anatomy, physiology and diseases of the aorta. He also has included methods of treatment and diagnosis. In such a book, one would expect to find authoritative and detailed information on these subjects. It is unfortunate that in many instances the subject matter is covered so briefly as to be of little value.

Chapter I consists of a brief discussion of the



DRINK
Coca-Cola
TRADE MARK REG.

You trust
its quality



*Best wishes for a Happy and Prosperous
New Year from every employe of this company*

• New facilities being installed by the company are to provide adequately for your present and future service requirements. Under the American Way of Life these utility services continue to be a Bargain In Living. • Greater joys, better opportunities, happy homes, and thriving communities are prospects to inspire faith and confidence of all in the promise of the days ahead.

Public Service Company of Colorado

for JANUARY, 1950

history, anatomy, histology, embryology, neurology and physiology of the aorta. It gives a quick review of these subjects but lacks detailed information.

Chapter II, on congenital anomalies involving the aorta, is brief, concise and valuable. It covers the anatomy, diagnosis and treatment of the various anomalies.

Chapters III and IV cover briefly the pathology, diagnosis and treatment of atherosclerosis and syphilis of the cardiovascular systems. Chapter V, on diseases at the origin of the aorta lumen, deals with aortic regurgitation and aortic stenosis.

Chapter VI on dissecting aneurysms, Chapter VII on occlusion of the aorta, and Chapter VIII on rare diseases of the aorta are well presented, pertinent and valuable.

Chapters IX and X cover diagnostic procedures both for aortic and for peripheral vascular diseases. Antibiotics and anticoagulants are discussed in Chapters XI and XII. Both subjects are well presented and covered.

Much of the material included in this book is discussed far better in standard texts on cardiovascular diseases, anatomy, histology, embryology and pathology. Of particular value are the chapters on congenital anomalies, syphilis, dissecting aneurysms, occlusion of the aorta, rare diseases of the aorta, diagnostic procedures and anticoagulants. The subject of antibiotics is in such a state of flux that it adds little to the value of the presentation.

The book will be primarily of value as a reference source.

D. H. BUCHANAN, JR.

Neoplasms of the Dog: By R. M. Mulligan, M.D., Professor of Pathology in the University of Colorado Medical Center School of Medicine. The Williams & Wilkins Company, Baltimore, 1949. Price, \$4.00.

This book is the result of a study of 1,500 tumors of various breeds of dogs. The tumors have been grouped in seven broad categories. Each type of neoplasm has been briefly and skillfully described and many pictured with excellent gross and microscopic photographs.

It is interesting that in the dog sarcoma occurs as frequently as carcinoma and that most cell tumors account for a large proportion of the sarcomas.

A few typographical errors are present, but on the whole the book is well edited. It is recommended to veterinarians, veterinary students and to pathologists.

S. M. PRATHER ASHE.

A Textbook of Surgery: By American Authors, Edited by Frederick Christopher, B.S., M.D., F.A.C.S., Professor of Surgery, Northwestern University Medical School; Chief Surgeon, Evanston (Illinois) Hospital. 1,465 Illustrations on 742 figures. Fifth Edition. W. B. Saunders Company, Philadelphia and London.

A perusal of the list of the new contributors to this new edition will show that few changes have resulted in the basic repertory of the subject matter as compared to the preceding edition. However, since there are ever-changing diagnostic procedures and surgical technics, this reviewer has selected a few chapters written by new contributors to this textbook for a brief discussion.

The chapter on tendon repair by Bunnell is an addition to the general theme of treating tendon sheaths and fascial spaces. Here early

and late tendon repair is described and is well illustrated. Bunnell uses stainless steel removable wire because it is non-irritating. He urges the postponement of several months for late tendon repair, for fear of latent infection.

The discussion of carcinoma of the breast, in the chapter on diseases of the breast by C. D. Hoagensen and A. P. Stout, is a distinct contribution to this important phase of breast pathology. One is impressed with the emphasis of meticulous procedures in examining a breast suspected of carcinoma, such as the shape, size of areolae and their comparative levels. Postural examination is an integral part of the overall procedure in a thorough investigation for this hidden lesion. In the authors' opinion the "retraction phenomenon" is of fundamental importance in the interpretation of the clinical signs of breast cancer. A simple procedure, such as raising an arm above the head, will sometimes reveal asymmetry of the breast or skin retraction. Erosion of the nipple surface is an important sign of carcinoma. It warrants a "presumptive" diagnosis of the Paget type of carcinoma. "Edema of the skin of the breast due to blocking the subdermal lymphatics is an important sign of carcinoma of advanced stage."

The above represent a few refinements in the clinical examination of the breast.

As to the present concept of the treatment of this important disease, these authors favor surgical eradication. They feel that no satisfactory evidence has been brought forth which proves that either radium or roentgen rays can compete with surgical treatment as a "curative agent." Both forms of radiation administered in maximal doses to the breast will arrest carcinoma for a time with considerable degree of success. However, microscopic studies show that not all carcinoma cells are destroyed. Some of these are merely "locked up in dense fibrous tissue," and after a variable period of time, usually two to five years, the disease regains its vigor and "recurs locally in most cases." Another disadvantage of intensive radiation is that it inflicts hardships upon the patient because two or three months are needed to administer it, and the after-effects, such as pain in the axilla and lymphedema are common.

Surgery then, according to these authors, appears to remain the sole reliable method for cure of breast cancer. Reference is made to Halstead and Willy Meyer, who devised independently the procedure which is the radial mastectomy. Emphasis is placed upon meticulous and gentle dissection.

Another contribution to this popular surgical textbook is the chapter on the surgery of the heart and pericardium. A vivid description is presented of the Taussig Blalock operation for anastomosing the left subclavian artery to the left pulmonary artery in congenital pulmonary stenosis. The tetralogy of Fallot and clinical manifestations are briefly discussed. This operation is analogous to the production of a patent ductus arteriosus. The anastomosis does not correct the deformity, but apparently results in an improvement in the circulation.

A similar operation is that of the Potts-Smith-Gibson type. This consists of making a direct anastomosis between the aorta and the pulmonary artery by using a special clamp which enables one to open the aorta without producing a complete occlusion.

In the diseases of the esophagus, Richard H. Sweets' classification of the lesions of the esophagus



Monterey Coast, California

NATURE PROVIDES A DEPENDABLE SOURCE



Special Morning Milk
is an evaporated milk of high
quality especially developed
for infant feeding and
fortified (from the natural source)
with 400 U.S.P. units vitamin
D and 2000 U.S.P. units
vitamin A per reconstituted quart.

Special
**MORNING
MILK**





From where I sit by Joe Marsh

A Tonic For The Missus

The missus came marching in with a new hat yesterday. She was as happy as a circus poster.

I've learned one thing about the hats she buys. A hat is a tonic to her. If she's feeling blue, nothing gives her a lift like a new hat. Now, I could trade in my old grey fedora without raising my blood pressure a notch. But I'll admit that more than once I've bought a new briar pipe I didn't need—just because life was getting a little bit monotonous.

With Buck Howell it's something else again. When Buck is feeling low, he gets over it by blowing on a broken-down clarinet he hasn't mastered in twenty years.

From where I sit, different people are *always* going to respond to different things in different ways. So let's keep a friendly understanding of what other folks get out of a new hat, an old clarinet, a chocolate soda or a temperate glass of sparkling beer or ale now and then.

Joe Marsh

Copyright, 1949, United States Brewers Foundation

gus is well illustrated, both diagrammatically and roentgenologically, particularly the steps in the excision of diverticulum of the pharyngoesophageal juncture and the closure of the resulting defects. Another instructive diagrammatic illustration are the steps in the resection of the esophagus for carcinoma of the midthoracic portion with high intrathoracic anastomosis.

Arthur W. Allen and Claude E. Welch have presented, in concise form, a well written and illustrative chapter on diagnosis and operative procedure of gastric ulcer. From a diagnostic standpoint, gastric analysis and gastroscopic examination are emphasized as valuable adjuncts; the latter is especially of value to x-ray studies. It will demonstrate acute superficial ulcers that are not visible on x-ray films and is exceedingly valuable in the diagnosis of gastritis. It is now possible to differentiate between cancer and ulcer and even the healing processes of a benign ulcer can be studied better by means of the gastroscope than by x-ray. In addition, biopsy specimens can now be obtained through the gastroscope. According to these authors, "gastric ulcers usually occur on the lesser curvature, anywhere between the cardia and pylorus. A few benign ulcers are located on the greater curvature, but in general all ulcerations in this location are malignant."

The principle of treatment of gastric ulcer is thoroughly described and graphically illustrated. In cases of perforated gastric ulcers, the perforation is closed with multiple sutures through the stomach wall, reinforced by a "generous tag of omentum." Vagotomy is condemned, even in "selected cases of gastric ulcers," because some of these ulcers may be malignant. Basically, the surgeon has a twofold problem. In the case of a benign lesion, he must secure an immediate cure and alter the physiologic status present in such a manner that the ulcer will not recur. On the other hand, should the lesion be malignant, an adequate cancer operation must be executed.

At best, a reviewer can only scratch the surface of a textbook which is comprehensive in scope and recommend to both students and practitioners to refer to it for diagnostic guidance and accepted basic surgical principles and newer technics devised by those who have become proficient in their chosen field.

GERALD H. FRIEDMAN.

Life Among the Doctors: By Paul De Kruif, in collaboration with Rhea De Kruif. To paint nature here, as everywhere, you must have lived in it a long time, Vincent Van Gogh. Harcourt, Brace and Company, New York. Price, \$4.75.

The doctors, "the men who have the power to live or die," who knows them better than Paul De Kruif (according to him). He has been associated with many different doctors. "At their best, medical men are the highest type reached by mankind, but at their worst they are little more than legalized murderers."

The reason for writing this book stems back to 1939 when De Kruif tried to interest F. D. Roosevelt in backing the saving of lives. F.D.R. disappointed him so that he decided to take his fight to the people of the U. S. A.

He tells of the tribulations and triumphs of medical pioneers who struggle, despite vicious opposition, to bring mankind the new life now made by the astonishing new birth of science. All these doctors are medical mavericks, fight-

ROCKY MOUNTAIN MEDICAL JOURNAL

DOROTHY

S
A
N
A
T
O
R
I
U
M

OLSEN'S

1625 Simms Street
Denver 14, Colo.

DEAR DOCTOR:

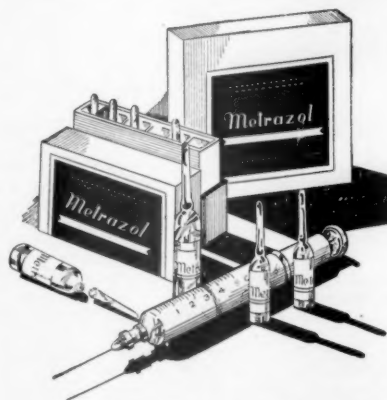
We know that you want the best for your aged patients. We sincerely believe we have the most Beautiful Convalescent Home in the Rocky Mountain Region. Beautifully decorated rooms, with new and modern equipment, and the most modern and sanitary kitchen.

Your patients will get excellent care under the best of conditions. We have had years of experience in this field and invite your inspection at any time. We are proud of our institution and the individual care given our patients. Truly an exclusive home for the aged and infirm. No Contagious or MENTAL Cases.

Nurses on duty 24 hours daily. Moderate rates.

Phone
Lakewood
1922

Very sincerely,
Dorothy B. Olsen



Metrazol, pentamethylentetrazol
Ampules, 1 cc. and 3 cc.
Sterile Solution, 30 cc. vials
Tablets and Powder

Metrazol

COUNCIL ACCEPTED

A DEPENDABLE, QUICK-ACTING CEREBRAL AND MEDULLARY STIMULANT

Metrazol is indicated for narcotic depression, for instance, in poisoning with barbiturates or opiates, in acute alcoholism and during the operation and postoperatively when respiration becomes inadequate because of medullary depression due to the anesthetic.

Inject 3 cc. Metrazol intravenously, repeat if necessary, and continue with 1 or 2 cc. intramuscularly as required.

Bilhuber-Knoll Corp. Orange, N. J.

We Recommend
KARG'S PAINT CO.
 Lowe Bros. Paints Kem-Tone
 Wall Paper Painters' Supplies
 — Art Supplies —
 — FREE DELIVERY —
 Phone CHerry 3779
 620 Santa Fe Drive Denver

Denver's Fireproof
COLBURN HOTEL
 D. B. Cerise is the genial Host and Manager
 ● **CONVENIENT** — Located only a ten-minute walk from the heart of the city.
 ● **PLEASANT** — Away from — above the noise and rush of downtown Denver.
 ● **EXCELLENT FOOD** — Dining that has satisfied the demanding tastes of all patrons.
 ● **Visit Our New Cocktail Lounge.**
TENTH AVE. at GRANT ST.
 Phone MAin 6261 Denver, Colo.

RESTAURANT 240
 MISS M. E. GABRIEL, Prop.
**SERVING TRADITIONALLY GOOD
 FOOD AT MODERATE PRICES**
HOURS: 11:00 A.M.—2:00 P.M. 4:30—7:30 P.M.
SUNDAYS: 12 Noon to 7:00 P.M.
 Closed Wednesdays
240 Broadway Denver, Colo.
SPruce 2182

We Cater to the Medical Profession
CASCADE LAUNDRY
**10 Per Cent Discount If You Bring Your
 Laundry in**
HAND DRY CLEANING
"Deserving of Your Patronage"
1621 Tremont Denver TABor 6379
Charge Accounts Invited

We Recommend
Jackson's Cut Rate Drugs
**LIQUORS—SUNDRIES
 PRESCRIPTIONS**
 ☪
Call SP. 3445
DOWNING and ALAMEDA

ing prejudice and ignorance in order to alleviate and often conquer human suffering. Included are: Clifford C. Young, head of Michigan's Health Department for twenty-five years, who has the record of saving more lives in Michigan than all the doctors there put together; Tom D. Spies, who pioneers in the revolutionary discovery that disease is chemical in many cases and therefore chemically correctable; Herman N. Bundensen, head of Chicago Health Department, who urged his young workers on to one day cure of infectious syphilis against bitter opposition of the medical hierarchy; Alvin F. Coburn, dreamy doctor, working twenty years to begin the solution of the murder mystery of rheumatic heart diseases; Leo Lowe, "bold" Brooklyn doctor, who, defying the government regulations of penicillin during World War II, was able to cure most all his cases of bacterial endocarditis; O. C. Wenger, public health doctor, who prevented V.D. despite the frowns of his own Public Health Service and became one of the best consultants on V.D.; George Hanke, lovely girl struggling against the torture of rheumatic fever; Herman Kabat, treating crippling aftermath of polio, multiple sclerosis and arthritis so that many hopeless now rise and walk.

The old man against cancer, anonymous x-ray worker, who, although fighting against the surgeons, brought cures of localized accessible malignant tumors; Sidney R. Garfield, California doctor, who with his economic genius showed people in California how to pay for medical care, thereby giving the first prepaid plan to Americans; Edna W. Schrick teaching patients how to stay away from their doctor, thus releasing him for a fight against inexorable deaths; Henry Rafin tells that we are not as old as our arteries but as old as our livers, thus adding years to many lives.

I found the discussion of the work by these doctors very interesting, but was disappointed by the way that the financial side was treated. It seemed to me that he (Paul De Kruif) often seemed to be advocating government medicine such as Truman is now trying to get passed by Congress.

GEORGE E. ORSBORN, JR.

BRONCHIAL ASTHMA FROM WOOD DUST

Only a few cases of bronchial asthma from breathing wood dust have been reported. They have been jewel polishers who come into contact with boxwood and orangewood dust; saw-mill workers handling pine wood. Some of these have been recognized for what they were—allergy. On the other hand, they were thought to be simple clogging of the lung with wood dust (pneumoconiosis).

In the current issue of *Annals of Allergy*, the official publication of the American College of Allergists, Dr. David Ordman of Johannesburg, South Africa, reports a new case, in a cabinet-maker who was proven to be allergic to Kejaet, western red cedar, and Congo hardwood. Treatment with extract of dusts from these woods kept him out of trouble for the year following cessation of treatment, and he was able to continue at work on his dusty occupation of cabinet worker.

Dr. Jonathan Forman of Columbus, Ohio, President of the college, gave it as his opinion that this is a distinct contribution to the problem of many workers in wood dusts who too often have not been recognized as having an allergic asthma, compensable by many workmen's compensation funds.

KE 4271

Burnace Hadley

OUT PATIENT HOTEL SERVICE

for

CONVALESCENTS

offered by

TOURS HOTEL

East Colfax at Lincoln
Denver, Colorado

60 Rooms

Free Parking

36 Baths

Nurse Escort



Surgical Supports Expertly Fitted.

Miss Mabel P. Cliff, Authorized Fitter

Denver Surgical Supply Company

"For better service to the profession."

1438-40 Tremont Place CHerry 4458
Denver 2, Colorado

**MEDICAL CENTER
PHARMACY**

Located in the New Medical Building
3701 East Colfax DEXter 5467
DENVER, COLO.

Prescriptions and Medical Supplies

Wm. K. VAN SANT, Mgr.

Free Delivery

Alba Dairy

Properly Pasteurized Milk

Ice Cream—Butter—Buttermilk



Phone 1101

Boulder, Colo

**PLAN NOW TO ATTEND THE
SIXTH ANNUAL CLINICAL CONFERENCE
CHICAGO MEDICAL SOCIETY**

February 28, March 1, 2, and 3, 1950

PALMER HOUSE

CHICAGO 3, ILLINOIS

A four-day meeting planned to keep you abreast of the latest developments in scientific medicine.

A group of outstanding men will present an excellent scientific program.

COLOR TELEVISION will be beamed from one of Chicago's large hospitals direct to the Palmer House.

Many instructive scientific and technical exhibits.

MAKE YOUR RESERVATIONS DIRECT WITH THE PALMER HOUSE

1850 — The One Hundredth Anniversary of the Chicago Medical Society — 1950



A Complete Production Service

**ELECTROTYPES
MATRICES
STEREOTYPES
PRINTING
TYPOGRAPHY**

Western Newspaper Union

Denver - - - - - 1830 Curtis St.
New York - - - - - 310 East 45th St.
Chicago - - - - - 210 So. Desplaines St.

And 33 Other Cities

NURSES OFFICIAL REGISTRY

Established to Meet the Community's
Every Need for Nursing Care

* * *

GRADUATE REGISTERED NURSES

Hourly Nursing Service Positions
Filled—Information on All
Nursing Service

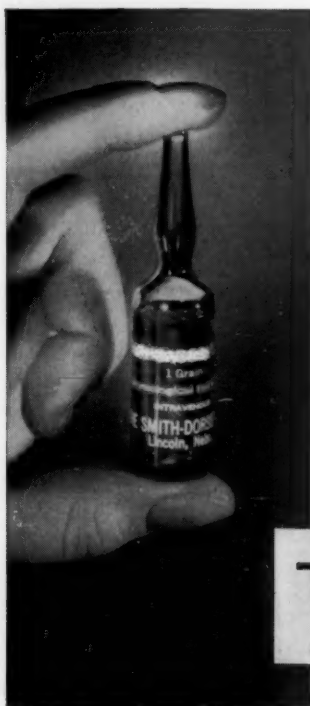
This registry is endorsed by the
Colorado State Graduate Nurses'
Association and American Nurses'
Association

* * *

*Undergraduates and Practical Nurses
Furnished Upon Request*

Keystone 0168

ARGONAUT HOTEL



What's Behind an Ampoule?

A FORMULA, a couple of machines and a label?
... That's about it—for *just* any ampoule.

But the careful physician won't settle for just
any product—ampoule or otherwise.
When he prescribes, he wants the label to
signify—beyond the shadow of a doubt—
a clean manufacturing record, preferably
one stretching back a generation or more;
unfailing adherence to controls;
a research program with adequate staff
and facilities; and for final confirmation, a
place on the roster of Council accepted products.

You need settle for nothing less when
you specify medication labeled

Dorsey



**THE SMITH-DORSEY COMPANY
LINCOLN, NEBRASKA
BRANCHES AT LOS ANGELES AND DALLAS**

**MANUFACTURERS OF FINE
PHARMACEUTICALS SINCE 1908**

ROCKY MOUNTAIN MEDICAL JOURNAL

WHY MANY LEADING NOSE AND THROAT SPECIALISTS SUGGEST

"change to PHILIP MORRIS"*

Where smoking is a factor in a throat condition,
the physician may advise "Don't Smoke."

But where the patient persists, many eminent
specialists suggest "Change to PHILIP MORRIS"...
the one cigarette proved definitely less irritating.**

Perhaps you too will find it advantageous
to suggest to your throat patients

"Change to PHILIP MORRIS." For your
own smoking as well, Doctor, in fact for all
smokers, Philip Morris is by far the wisest choice.



PHILIP MORRIS

Philip Morris & Co., Ltd., Inc.
119 Fifth Avenue, N. Y.

IF YOU SMOKE A PIPE... We suggest an
unusually fine new blend—COUNTRY DOCTOR PIPE
MIXTURE. Made by the same process as used in
the manufacture of Philip Morris Cigarettes.

*Completely documented evidence on file.

**Reprints on Request:

Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngo-
scope, Jan. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp.
Biol. and Med., 1934, 32, 241; N. Y. State Journ. Med., Vol.
35, 6-1-25, No. 11, 590-592.

Your Best

BUY—

• **PRINTING**

From

DRYER-ASTLER PRINTING CO.

1936 Lawrence Street
KEystone 6348

*50 Years of Ethical Prescription
Service to the Doctors of Cheyenne*



ROEDEL'S
PRESCRIPTION DRUG STORE
CHEYENNE, WYOMING

W. J. Roche

**Ambulance
Service**



Prompt, Careful and Courteous

Serving Denver 25 Years
Approved by Physicians Generally

18th Ave. at Gilpin St., Phone EA. 7733

MALONE DRUG CO.

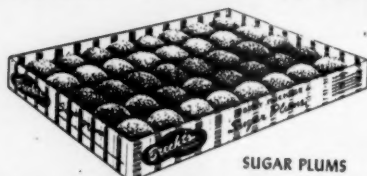
New, Modern, Drug Store Service

PRESCRIPTIONS A SPECIALTY

FREE DELIVERY

100 So. Broadway SPruce 6226
Denver, Colorado

The Craving for Candy Often Is
A CALL FOR ENERGY



SUGAR PLUMS

**Recommend Brecht's
For Your Patients . . .**

SUGAR PLUMS . . . tenderest of fruit-flavored Jelly Candies, made with sugar, corn syrup, dextrose, citrus fruit pectin, U. S. Certified Colors. Cellophane-topped Party Packages.

PANTRY SHELF . . . delicious hard candies in many flavors. Refreshing fruit drops, crunchy filled wafers . . . flavor sealed—in glass jars.

DAINTY STICKS . . . so delicious and pure. Made from sugar, dextrose, corn syrup, finest flavorings, U. S. Certified Colors, Assorted flavors.

Brecht's
DENVER

**YORK
PHARMACY**

Denver's Finest Prescription Store

J. GLEN MATSON, Owner

Free Delivery
Phone FR. 8837

2300 East Colfax Avenue at York Street
Almay Cosmetics

Bonita Pharmacy

(Established 1921)

Prescription Pharmacists

6th Avenue at St. Paul Street

"RIGHT-A-WAY" SERVICE

GERALD P. MOORE, Manager
Phone FRemont 2797

- Incubation of the premature infant.
- Reception of the new-born in the delivery room.
- Isolation of the infant with a contagious illness.
- A miniature nursery for complete care of the infant "rooming-in."
- Facility for the care and treatment of respiratory infections.
- Clean infant room for babies born outside or returned to the hospital.



Baby's Haven, Model NB-5-- "The Multipurpose Unit"

CONSTRUCTION BRIEFS

1. Welded steel cabinet with baked enamel finish.
2. Fenwal thermostatic control.
3. Pre-set Fenwal thermostatic maximum limit.
4. Control dial calibrated in Fahrenheit degrees.
5. Panel mounted 6-ampere overload fuse.
6. Long-lasting neon power and heat indicators.
7. Permanent Chromolux heating element.
8. Unique mattress of porous, woven Lumite fabric.
9. Sleeping mat adjustable to various degrees in Trendelenberg.
10. Upholstered throughout with top quality vinyl plastic.
11. Three-ply safety sheet glass used throughout.
12. Oxygen inlet for 1/4-inch hose.
13. Interior nozzle for attachment of hose and cone for direct administration of oxygen.
14. Adjustable shutter for control of air flow.
15. Glass humidity tank and spun glass wick.
16. Both top and side doors for complete access to the infant.
17. Lower metal door for access to humidity tank without disturbing the infant.
18. Chrome steel legs of simple unobstructed design for ease in cleaning beneath the unit.
19. Three-inch, ball-bearing, hard rubber "Swivelock" casters.
20. Heavy duty, rubber, three-wire grounded lead cord.
21. Counter-balanced top door for ease of operation and to avoid the danger of accidental closure.
22. Recessed control panel.
23. Safety straps for rooming-in.
24. Bakelite mountings for all electrical apparatus.
25. All wiring and electrical fittings within removable control box.
26. Choice of four colors in lots of four or more for rooming-in.
27. Dimensional Data:
Height—46"
Length—29 1/2"
Width—18"
Baby's Level—36"
28. Oxygen Data:
5 liters per minute—40 to 50%.
6 liters per minute—50 to 60%.



All Equipment Underwritten and Guaranteed

PHYSICIANS AND HOSPITALS SUPPLY CO., Inc.
MINNEAPOLIS MINNESOTA

**The Complete
RENTAL SERVICE**

Cooler — Water — Cups

*Modernize Your Office With
PURE DEEP ROCK
Artesian Water*

COLD STORAGE SPACE
For Biological Supplies

ICE CUBES
A Generous Supply

ELEC. WATER COOLERS
All Types and Makes

FOR RENT OR FOR SALE

DEEP ROCK WATER CO.
614 27th St. TAbor 5121



- Preferred and Common Stocks
- Industrial Bonds
- Public Utility Bonds
- Railroad Bonds
- Municipal Bonds
- Government Bonds

Peters, Writer & Christensen Inc.
Investment Bankers

724 Seventeenth Street, Denver 2

MAin 6281



FAIRFAX SANITARIUM

Kirkland, Wash.

Situated one mile north of Juanita

**TREATING NERVOUS AND
MENTAL DISEASES**

Beautiful and restful surroundings affording recreational facilities. Cottage plan for segregation of patients. Insulin and Electro-shock Therapy when indicated.

Attending Physicians
FREDERICK LEMERE, M.D.
NATHAN K. RICKLES, M.D.
JAMES H. LASATER, M.D.
MORTON E. BASSAN, M.D.
JACK J. KLEIN, M.D.

Manager: A. G. HUGHES
Route 2, Box 365, Kirkland
Phone: Kirkland 2391

Pure, Crystalline Anti-Anemia Factor

IMPORTANT PRICE REDUCTION

Economical—the new, low price of Cobione makes this highly potent therapeutic substance a most economical preparation.*

Weight for Weight, the Most Potent Therapeutic Substance Known

Minimum Dosage—Maximum Therapeutic Activity

Nontoxic—Stable—Nonsensitizing

Effective and well tolerated in patients sensitive to liver or concentrates

RAPID THERAPEUTIC EFFECT

Because Cobione is virtually nonirritating on injection, large doses capable in many instances of producing rapid relief of neurologic manifestations in pernicious anemia may be administered with this pure, crystalline anti-anemia factor.

P-R-O-L-O-N-G-E-D ACTION

Large doses of Cobione also may be given without tissue irritation or induration to obtain a more prolonged therapeutic effect.



The U.S.P. Anti-anemia Preparations Advisory Board has recently advised that—with the exception of preparations of Crystalline Vitamin B₁₂—it is considered to be contrary to the best interests of patients and of the medical and pharmaceutical professions for the result of unofficial assay procedures for Vitamin B₁₂ to be stated on the labels of U.S.P. Anti-anemia Preparations.

*COBIONE is the registered trade-mark of Merck & Co., Inc. for its brand of Crystalline Vitamin B₁₂



MERCK & CO., Inc.
Manufacturing Chemists
RAHWAY, N. J.

BB₁₂

Cobione®
Crystalline Vitamin B₁₂ Merck

YOUR CUE FOR INFANT FEEDING

**QUALITY
ECONOMY
UNIFORMITY
CONVENIENCE**

NORMAL DILUTION
Dextrogen® + Water = Formula

1 fl. oz. (50 Cals.)	1½ fl. ozs.	2½ fl. ozs. (20 Cal. per fl. oz.)
-------------------------	-------------	---

Dextrogen
 REG. U.S. PAT. OFF.
NESTLÉ
 COWS' MILK MODIFIED
 WITH
 DEXTRINS, MALTOSE & DEXTROSE
 AND WITH THE ADDITION OF A SMALL AMOUNT OF
 SODIUM PHOSPHATE AND IRON SACCHARATE

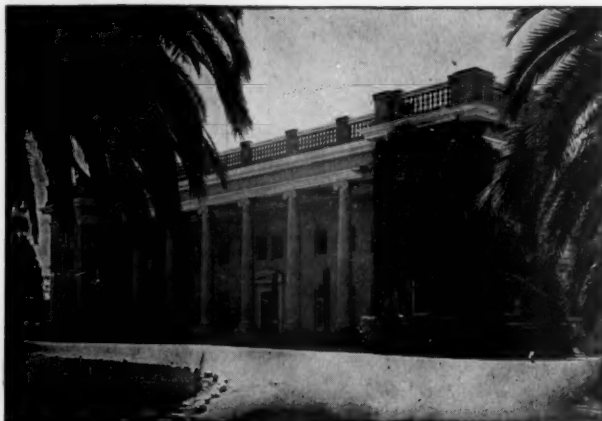
EVAPORATED **HOMOGENIZED** **STERILIZED**

NET WEIGHT 14½ OUNCES
 EQUIVALENT TO 12.8 FLUID OUNCES
 PREPARED BY
THE NESTLÉ COMPANY, INC., NEW YORK, U.S.A.

ACCEPTED
 COUNCIL ON
 FOOD AND
 NUTRITION

ADVERTISED TO THE MEDICAL PROFESSION ONLY

LIVERMORE SANITARIUM



• The Hydropathic Department devoted to the treatment of general diseases, excluding surgical and acute infectious cases. Special attention given functional and organic nervous diseases. A well equipped clinical laboratory and modern X-ray Department are in use for diagnosis.

• The Cottage Department (for mental patients) has its own facilities for hydropathic and other treatments. It consists of small cottages with homelike surroundings, permitting the segregation of patients in accordance with the type of psychosis. Also bungalows for individual patients, offering the highest class of accommodations with privacy and comfort.

GENERAL FEATURES

1. Climatic advantages not excelled in United States. Beautiful grounds and attractive surrounding country.
2. Indoor and outdoor gymnastics under the charge of an athletic director. An excellent Occupational Department.
3. A resident medical staff. A large and well-trained nursing staff so that each patient is given careful individual attention.

Information and circulars upon request.

Address: O. B. JENSEN, M.D.
 Superintendent and Medical Director
 LIVERMORE, CALIFORNIA
 Telephone 313

CITY OFFICES:

SAN FRANCISCO
 450 Sutter Street
 GARfield 1-5040

OAKLAND
 1624 Franklin Street
 GLencourt 1-5988

PROFESSIONAL LIABILITY INSURANCE

Have You Read Your Policy?

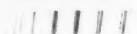
Does it contain the word "NEGLIGENCE"?

Does it contain the words "PROPERTY DAMAGE"?

If not, phone us for an appointment and let us explain the

Policy issued by the

UNITED STATES FIDELITY & GUARANTY COMPANY



and approved by
The Colorado State Medical Society

MORGAN, LEIBMAN & HICKEY, Agents

Gas & Electric Bldg.

Denver

Phone TAbor 1395



WINNING HEALTH
in the
Pikes Peak Region

COLORADO SPRINGS

Inquiries Solicited

GLOCKNER PENROSE HOSPITAL

Sisters of Charity
HOME OF MODERN SANATORIA

WESTERN ELECTRIC HEARING AIDS



Engineered by Bell Telephone Laboratories

SOME of the exclusive features of this new Vacuum Tube Hearing Aid are: Sealed Crystal Microphone—gives same dependable service under all conditions of temperature and humidity. Stabilized Feedback — amplification without distortion. No sudden blast from loud sounds when volume is turned up.

For other information write or call

M. F. TAYLOR LABORATORIES

721 Republic Building
MAin 1920 Denver, Colo.

RELIABLE DRUGGISTS

PATRONIZE DENVER'S INDEPENDENT DRUGGISTS

**WE RECOMMEND
COUNTRY CLUB
PHARMACY**
PRESCRIPTION SPECIALISTS



1700 E. 6th Ave. **EAsT 7743**
Denver, Colorado

We Recommend

Kincaid's Pharmacy

JESS L. KINCAID, Prop.
*Prescriptions, Biologicals
and Fine Cosmetics*

7024 W. Colfax Ave.
Phone Lakewood 436
LAKEWOOD, COLORADO

We Welcome Your Patronage
ROBERTS PHARMACY

East 23rd Ave. at Oneida St.
Phones: **EAsT 7783-EAsT 7784**
D. Lyall Roberts, Prop.

We Pick Up and Deliver Prescriptions
Prompt Free Delivery Service

Our Prescription Stock Is Complete

We Recommend

EARNEST DRUG COMPANY

T. H. BRAYDEN, Prop.

PRESCRIPTION SPECIALISTS

Prompt Delivery Service

1699 Broadway Phone **KEystone 7237**
Denver, Colorado

"Conveniently Located for the Doctor"

22 Years in the Heart of North Denver

GUIDO SHUMAKE DRUGS
PRESCRIPTIONS ACCURATELY
COMPOUNDED

Free Delivery Service

West 38th Ave. and Clay Denver, Colo.
Phone **GRand 9934**

We Recommend

BONNIE BRAE DRUG COMPANY

Alfred C. Anderson, Owner and Manager
Prescriptions Accurately Compounded
Drugs . . . Sundries
Complete Line of Cosmetics
FREE DELIVERY

763 South University Boulevard
Phone **RAce 2874** — Denver, Colorado

**WE RECOMMEND
Whittaker's Pharmacy**

"The Friendly Store"

PRESCRIPTION SPECIALISTS
West 32nd and Perry, Denver, Colo.
Phone **GLendale 2401**

23 Years in North Denver

OTTO DRUG COMPANY

TRY US FIRST

Prescriptions Accurately Compounded

Free Delivery Service

(New Location)

5070 Federal Boulevard Denver, Colorado
Phone **GRand 9832**

HYDE'S PHARMACY
ACCURATE PRESCRIPTIONS

Chas W. Hyde, Prop.

Rocky Mountain Distributor for Sherman
Biologicals and Pharmaceuticals

Free Deliveries

629 16th St. (Mack Bldg.) **KE. 4811**

Doyle's Pharmacy

"The Particular Druggist"

East 17th Ave. at Grant **KE. 5987**

RELIABLE DRUGGISTS

PATRONIZE DENVER'S INDEPENDENT DRUGGISTS

WALTERS DRUG STORE
801 COLORADO BLVD.
Denver, Colorado



Telephone FRemont 5391

WE RECOMMEND
LAKEWOOD PHARMACY

R. W. Holtgren, Prop.

PRESCRIPTION SPECIALISTS

West Colfax at Wadsworth
Lakewood Colorado
Phone Lakewood 65

It's Wise to Buy at Weiss

WEISS DRUG

PRESCRIPTION SPECIALISTS



Colfax and Elm Denver, Colorado
Phone EAsT 1814

Downing Street Pharmacy

GEORGE M. HILL, Prop.

PROFESSIONAL PHARMACIST

901 Downing St. Denver, Colo.
Phone ALpine 4465

Complete Merchandise Line
Free Delivery on Prescriptions

We Recommend

VAN'S PHARMACY

THOS. A. VANDERBUR

Prescriptions, Drugs, Cosmetics, Magazines
Sundries Excellent Fountain Service

2859 Umatilla St., Cor. 29th Ave. at Umatilla
GRand 7044 Denver, Colo.

East Denver's Prescription Drug Store

FRANKLIN DRUG CO

Bert C. Corgan, Prop.

3401 FRANKLIN STREET
KEystone 7241

Dansberry's Pharmacy

"New Ultra Modern Prescription Service"

JAMES F. DANSBERRY

Owner and Manager

Champa at 14th Street Denver, Colorado
Phone KEystone 469

OVERSTAKE'S PHARMACY

Gail E. Overstake

Prescription Specialists

DRUGS — SUNDRIES —
COSMETICS — CANDIES

We Deliver

1000 So. Gaylord — RAce 4401

Harl Cleveland, Owner

CLEVELAND PHARMACY

W. 29th Ave. at Speer Ph. GL 9272

Modern Prescription Department
Registered Pharmacist

Drugs — Sundries — Soda Fountain

HOURS: Week Days, 8 a.m. to 10 p.m.

Sundays, 10 a.m. to 1 p.m., 3 p.m. to 6 p.m.

Prescriptions Delivered Promptly

PROFESSIONAL MEN RECOMMEND

Professional
PHARMACY, INC.

D. MALCOLM CAREY, Pharmacist

Phone ACom 3711

224 Sixteenth Street Denver, Colorado

SERVICE

QUALITY

PAUL WEISS PRESCRIPTION OPTICIAN

1620 ARAPAHOE ST.

DENVER

MAin 1722

Stodghill's Imperial Pharmacy

Prescriptions Exclusively

For your prescriptions we stock a complete line of ALMAY—non-allergic—cosmetics.

Five Pharmacists

319 16th St.

TAbor 4231

Denver, Colo.

PATRONIZE YOUR ADVERTISERS



The

Colorado Springs Psychopathic Hospital

A Private Hospital for Nervous and Mental Diseases

Situated in a beautiful valley two miles south of Colorado Springs, which is nationally known as a health center. New building for mild cases of Functional Neurosis, affording complete classification of patients. Home-like surroundings, scientific medical treatment and nursing care. Booklet and rates on application.

C. F. Rice, Superintendent, Colorado Springs, Colorado

T H E A L C O H O L I C

DEFINITION

Some think the alcoholic simply weak and lacking will power...Others consider him a neurotic. We believe excessive drinking to be a disease wherein the patient has an abnormal reaction to alcohol different from that of a normal drinker. As soon as alcohol starts circulating in the blood the alcoholic develops a morbid change in personality and judgment inimicable to his welfare and that of his dependents.

Now available, upon request, Volume I,
Collected Papers of Shadel Sanitarium.



Shadel
SANTARIUM

SPECIALISTS IN THERAPY FOR CHRONIC ALCOHOLISM

BY THE CONDITIONED REFLEX AND ADJUVANT METHODS

7106 35th Ave., S. W., Seattle 6, Wash. WEst 7232

Recognized by the American Medical Association

Member of the American Hospital Association



Cook County Graduate School of Medicine

ANNOUNCES CONTINUOUS COURSES

SURGERY—Intensive Course in Surgical Technique, Two Weeks, starting January 23, February 20. Surgical Technique, Surgical Anatomy and Clinical Surgery, Four Weeks, starting February 6, March 6. Surgery of Colon and Rectum, One Week, starting March 6. Esophageal Surgery, One Week, starting June 5. Breast and Thyroid Surgery, One Week, starting June 26. Thoracic Surgery, One Week, starting June 12. Gallbladder Surgery, Ten Hours, starting April 24. Fractures and Traumatic Surgery, Two Weeks, starting April 17.

GYNECOLOGY—Intensive Course, Two Weeks, starting February 20. Vaginal Approach to Pelvic Surgery, One Week, starting March 6.

OBSTETRICS—Intensive Course, Two Weeks, starting March 6.

PEDIATRICS—Intensive Course, Two Weeks, starting April 3. Personal Course in Cerebral Palsy, Two Weeks, starting July 31.

MEDICINE—Intensive General Course, Two Weeks, starting April 24. Hematology, One Week, starting May 8. Gastro-Enterology, Two Weeks, starting May 15. Liver and Biliary Diseases, One Week, starting June 5. Gastroscopy, Two Weeks, starting March 6.

DERMATOLOGY—Formal Course, Two Weeks, starting May 8. Informal Clinical Course every two weeks.

UROLOGY—Intensive Course, Two Weeks, starting April 17. Cystoscopy, Ten Day Practical Course, every two weeks.

GENERAL, INTENSIVE AND SPECIAL COURSES IN ALL BRANCHES OF MEDICINE, SURGERY AND THE SPECIALTIES

TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL

ADDRESS: Registrar, 427 South Honore Street, Chicago 12, Illinois

ACCIDENT - HOSPITAL - SICKNESS

INSURANCE

For

Physicians, Surgeons, Dentists Exclusively



\$5,000.00 accidental death \$25.00 weekly indemnity, accident and sickness	\$8.00 Quarterly
\$10,000.00 accidental death \$50.00 weekly indemnity, accident and sickness	\$16.00 Quarterly
\$15,000.00 accidental death \$75.00 weekly indemnity, accident and sickness	\$24.00 Quarterly
\$20,000.00 accidental death \$100.00 weekly indemnity, accident and sickness	\$32.00 Quarterly

Cost has never exceeded amounts shown.
ALSO HOSPITAL EXPENSE FOR MEMBERS, WIVES & CHILDREN

85c out of each \$1.00 gross income used for members' benefit

\$3,700,000.00 INVESTED ASSETS **\$15,700,000.00 PAID FOR CLAIMS**

\$200,000.00 deposited with State of Nebraska for protection of our members. Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

47 years under the same management
400 First National Bank Building, Omaha 2, Nebraska

The BROWN SCHOOLS

For Exceptional Children

Four distinct units. Tiny Tots through the Teens. Ranch for older boys. Special attention given to educational and emotional difficulties. Speech, Music, Arts and Crafts. Full time Psychologist. Under the daily supervision of a Certified Psychiatrist. Registered Nurses. Private swimming pool, fireproof building. View Book. Summer Camp. Approved by State Division of Special Education.

BERT P. BROWN

President

Paul L. White, M.D., F.A.P.A.,
Medical Director

P. O. Box 4008, Austin, Texas

DON'T DEPEND ON LUCK

FOR AUTOMOTIVE SERVICE

Visit Denver's
LEADING SERVICE CENTER

Where You Get
Quality at a
Fair Price!

Open Evenings 'Til 9

CAPITAL CHEVROLET CO.

TELEPHONE TABOR 5191
13TH & BROADWAY • DENVER

Index to Advertisers

Page	Page	Page
Abbott Laboratories51	Earnest Drug Company74	Peters, Writer & Christen- sen, Inc.70
Alba Dairy65	Ehret Engraving Co.12	Phillip Morris & Co.67
American Meat Institute..... 9	Fairfax Sanitarium70	Physicians and Hospitals Supply Co.69
American Medical and Dental Association 8	Fairhaven Maternity Hospital 4	Physicians Casualty Assn.78
Ames Company, Inc.16	Franklin Drug Company.....75	Professional Pharmacy75
Ayerst, McKenna & Harrison.53		Public Service Co.69
	Glockner Penrose Hospital.....73	Restaurant 24064
Bilhuber-Knoll Corp.63	Holland-Rantos Company.....47	Roberts Pharmacy74
Bonita Pharmacy68	Hyde's Pharmacy74	Roche Ambulance Service68
Bonnie-Brae Drug74	Jackson's Cut Rate Drug.....64	Roedel's Prescription Drug.....68
Borden Company49	Karg Paint Co.64	Schering Corporation 7
Brecht's Candy68	Kendrick-Bellamy Co. 2	Searle, G. D. & Co.45
Brown School78	Kincaid's Pharmacy74	Shadel Sanitarium77
Burroughs Wellcome & Co.13	Lakewood Pharmacy75	Shadford-Fletcher Optical Co.10
Cambridge Dairy 4	Lederle Laboratories11	Shumake Drug, Guido.....74
Capital Chevrolet78	Lilly, Eli & Co. Insert Between16-17	Smith-Dorsey Co.66
Cascade Laundry64	Livermore Sanitarium72	Squibb, E. R. & Sons..... 5
Chicago Medical Society65	M & R Dietetic LaboratoriesCover III	Stodghill's Imperial Pharmacy76
Children's Hospital Assn.80	Malone Drug Store68	Telephone Answering Service... 4
City Park Dairy.....10	Mead, Johnson & Co.Cover IV	Thornton, George R. 2
Cleveland Pharmacy75	Medical Center Pharmacy.....65	Tours Hotel65
Coca-Cola59	Merck & Co.71	U. S. Army—U. S. Air Force— Medical Service55
Colburn Hotel64	Morgan, Leibman & Hickey.....73	United States Brewing Industry62
Colorado Springs Psycho- pathic Hospital76	Morning Milk61	Van's Pharmacy75
Continental Casualty Co.57	Nestle Company, Inc., The72	Walter's Drug Store75
Cook County Graduate School of Medicine.....78	Nurses Official Registry.....66	Weiss Drug75
Country Club Pharmacy.....74	Otto Drug Company74	Weiss, Paul76
Dansberry's Pharmacy75	Overstake's Pharmacy75	Western Electric Hearing Aids73
Deep Rock Water70	Park Floral Company12	Western Newspaper Union.....66
Denver Oxygen Co.12	Parke, Davis & Co.Cover III	Whittaker's Pharmacy74
Denver Surgical Supply Co.65		Winthrop-Stearns, Inc. 3
Dorothy Olesen's Sanatorium.63		Woodcroft Hospital80
Dorr Optical Co.14		Wyeth, Inc.15
Downing Street Pharmacy.....75		York Pharmacy68
Doyle's Pharmacy74		
Dryer-Astler Printing Co.68		



Woodcroft Hospital—Pueblo, Colorado

A private hospital for the scientific treatment of neuro-psychiatric disorders, including alcoholism and drug addiction. Beautiful landscaping and home-like surroundings afford a restful atmosphere. Accommodations vary from single rooms with or without bath to rooms en suite, allowing for segregation of guests.

Detailed information furnished on request.

Karl J. Waggener, M.D.

Wendell T. Wingett, M.D.



THE CHILDREN'S HOSPITAL ASSOCIATION of DENVER

NON-SECTARIAN—NON-PROFIT

Providing medicinal and surgical aid to sick and crippled children of the Rocky Mountain Region from Birth to Maturity

*Every modern scientific aid available to the physicians and surgeons
of Colorado and Wyoming*

**Approved by the American Medical Association and
the American College of Surgeons**

**Full Three-Year
Nurses' Training Course**

whenever
possible . . .
BREAST FEEDING
as long as
possible . . .



2 BABIES THRIVE ON
EASILY DIGESTED SIMILAC
WITH ITS ZERO CURD TENSION

SIMILAC DIVISION • M & R DIETETIC LABORATORIES, INC.

1 ONLY
SIMILAC
IS NEEDED



or

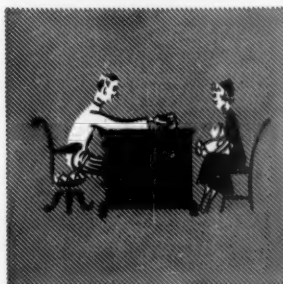
SIMILAC

*so similar to human breast milk
that there is no closer*

equivalent

1. SAVES TIME AND MONEY—one can of Similac supplies 116-oz. of formula—20 calories an ounce at an average cost of less than 9/10ths of a cent per ounce.
2. SAVES TIME AND MONEY—no milk modifiers needed with Similac; its higher vitamin content must be considered; helps avoid costly complications of ordinary formula feedings.
3. SAVES TIME AND MONEY—easily prescribed, easily prepared—simply 1 measure of Similac to 2 oz. of water.

SIMILAC FOR GREATER INFANT FEEDING VALUES



3 SAVES
YOU
TIME

COLUMBUS 16, OHIO

Flexible Formulas



with **DEXTRI-MALTOSE**
simple to prescribe...simple to prepare

Milk plus water plus Dextri-Maltose*—*simple to prescribe*—
is the mixture most widely used in the flexible formula system
of infant feeding. Dextri-Maltose has helped physicians
to build this system, now recognized the world over.

Formulas with Dextri-Maltose are *simple to prepare*.
Dextri-Maltose is easily
measured, is readily
soluble, and can be used
in any method of
formula preparation.

*T. M. Reg. U. S. Pat. Off.



MEAD'S

MEAD JOHNSON & CO.
EVANSVILLE 21, IND., U. S. A.

